THE AMERICAN
School Board Journal

A PERIODICAL OF SCHOOL ADMINISTRATION

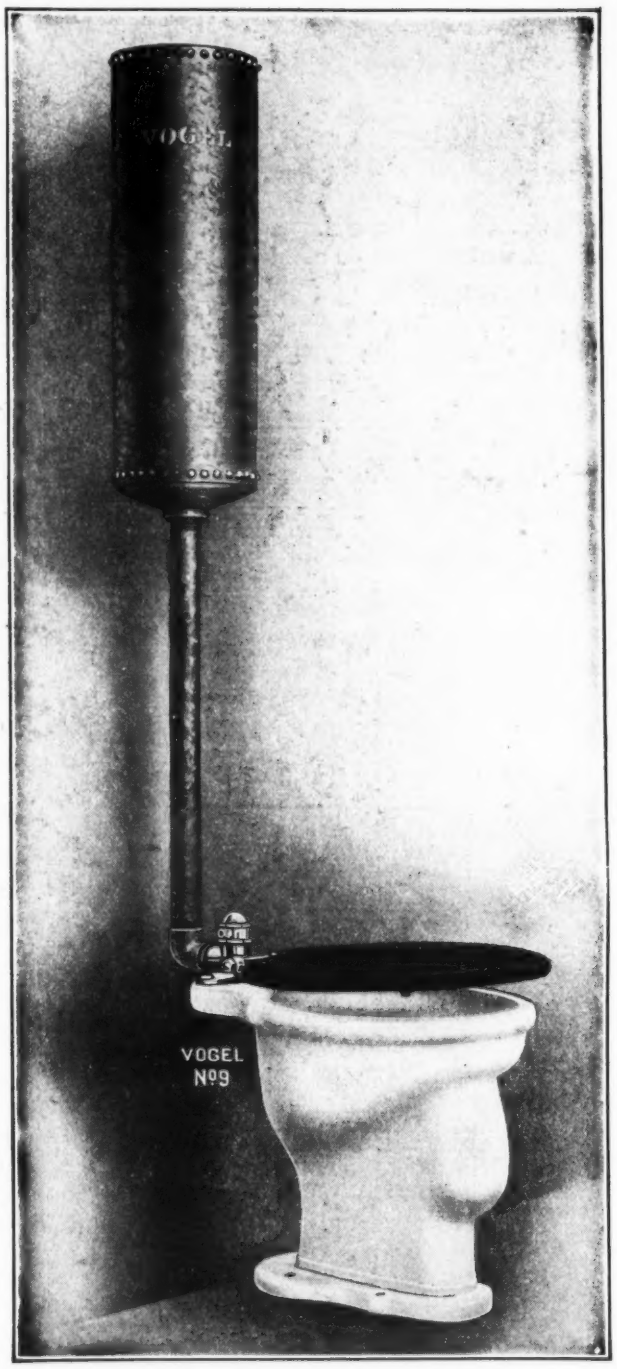
THE BRUCE PUBLISHING COMPANY
MILWAUKEE, WISCONSIN

Vol. 74, No. 6 JUNE, 1927

VOGEL

PATENTED

Number 9 Automatic School Water Closet



This closet is made to stand the rough usage of the school water closet.

Economical in the use of water.

Seldom requires repairs.

Easy of access when repairs are necessary.

The simplest and most durable automatic water closet.

Many Thousands in use.

Sold by Wholesalers of Plumbing Supplies Everywhere

JOSEPH A. VOGEL CO.

Wilmington, Delaware **St. Louis, Missouri**

Protect their Eyes

IN schools, where children's eyes are subjected to constant strain—there good light is needed. Reading from distant black boards—from books published on glazed paper puts young eyes to test every day of the school year.

Modern school officials are fast realizing that for the best protection of children's eyes, light must be provided that is clear enough to reach every corner of the room, and yet it must be soft, glareless light.

Sol-Lux Luminaires have been produced by engineers who had those two things in mind constantly—ample light, yet glareless light.

Economical

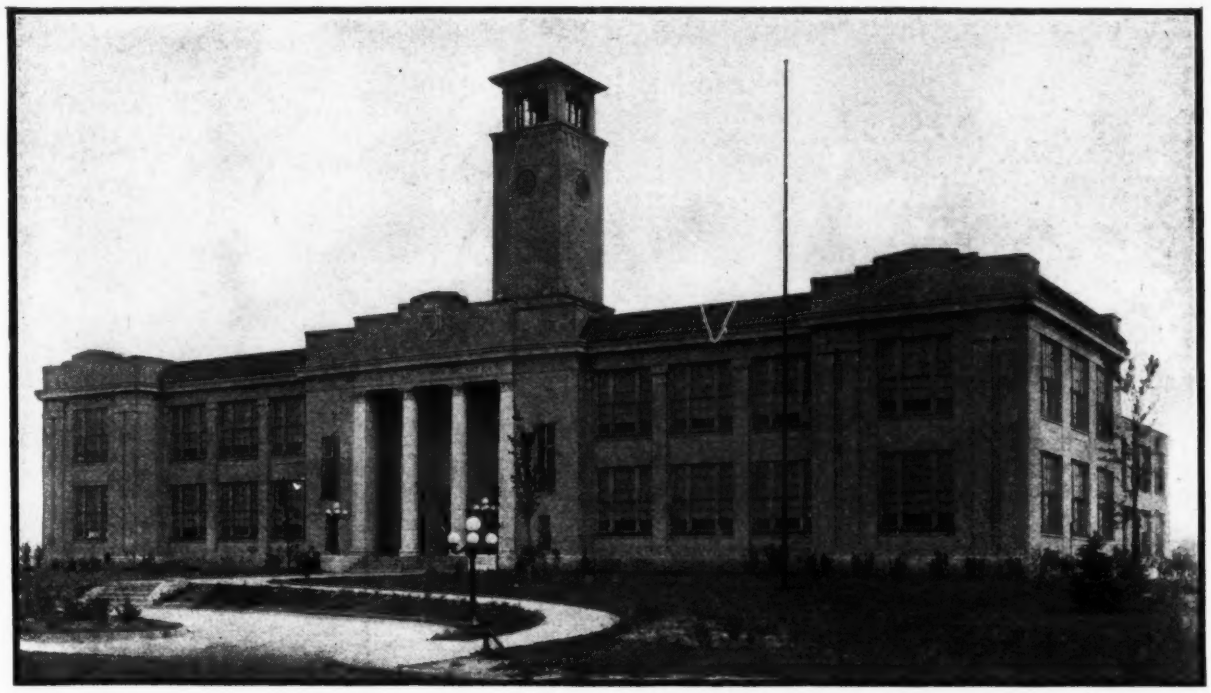
And then too, Sol-Lux Luminaires are economical. They produce more light for the electricity used. The tight fitting globe keeps out dust and bugs—less time is required for cleaning. The tilt-out cap makes the changing of lamps the work of a few seconds, and reduces the chance of lamp breakage to a minimum.

Write or phone our nearest office. There, you will find a competent lighting expert ready to advise you regarding your lighting problems.

Westinghouse Electric & Manufacturing Company
Merchandising Department
South Bend Works South Bend, Indiana

Westinghouse

X92762



Harbrack Union High School of Harrison Township and Brackenridge Borough, Natrona Heights, Pa. John H. Phillips is the Architect. Columbia Damasko Shades on Columbia Wood Rollers equip this school.

This shade may be *down*– but *it's never out!*

SWISH . . . The window shade goes snapping up to the ceiling. Jerk! And it's yanked down again.

Small wonder that ordinary window shades "go wrong." After a few months of this unavoidable careless handling, they can't resist the temptation to wear out. Then somebody has a replacement bill to pay.

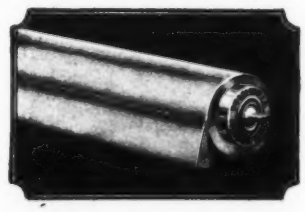
But when you specify *Columbia* Window Shades, replacement bills drop.

A recent survey brought to light the astounding fact that in many typical *Columbia* installations *the annual upkeep cost was running as low as 25 cents for each one hundred dollars of original investment.*

Let us send you some samples of *Columbia* Shade Cloth, and you'll understand why. You'll see a close-woven, firm-textured shade cloth—one that we can easily afford to guarantee not to tear, pinhole or stretch out of shape—a shade made for hard wear and rough treatment.

Columbia Shade Cloth is made in a wide variety of attractive tone colors, assuring harmony with the exterior and interior of every type of building. These colors are not only beautiful in themselves, but—*they tone daylight.* Being translucent they permit plenty of soft, mellow light to enter a room and at the same time eliminate all unpleasant, eye-straining glare.

Yet, despite all these points of superiority in appearance and construction—*Columbia* Window Shades are no more expensive than ordinary shades.



The superiority of *Columbia* Rollers is due in large measure to three unique features. *Feature 1.* A spring 30% to 40% stronger than that of ordinary rollers. This means greater lifting power and longer wear. *Feature 2.* Nickel-plated ferrules of brass instead of the usual steel—this makes the roller *rust-proof*—not just rust-resisting. *Feature 3.* A self-lubricating bearing—this insures smooth, silent operation so essential in hospital equipment.

Your Time Saver

You can save time and trouble by using the "Standard Specification for Window Shades," which we'll gladly send on request. A specimen roller and samples of *Columbia* Cloth are sent with the specification. Just fill in coupon and mail to The *Columbia* Mills, Inc., 225 Fifth Ave., New York.

Name .....

Street .....

City S-6-27

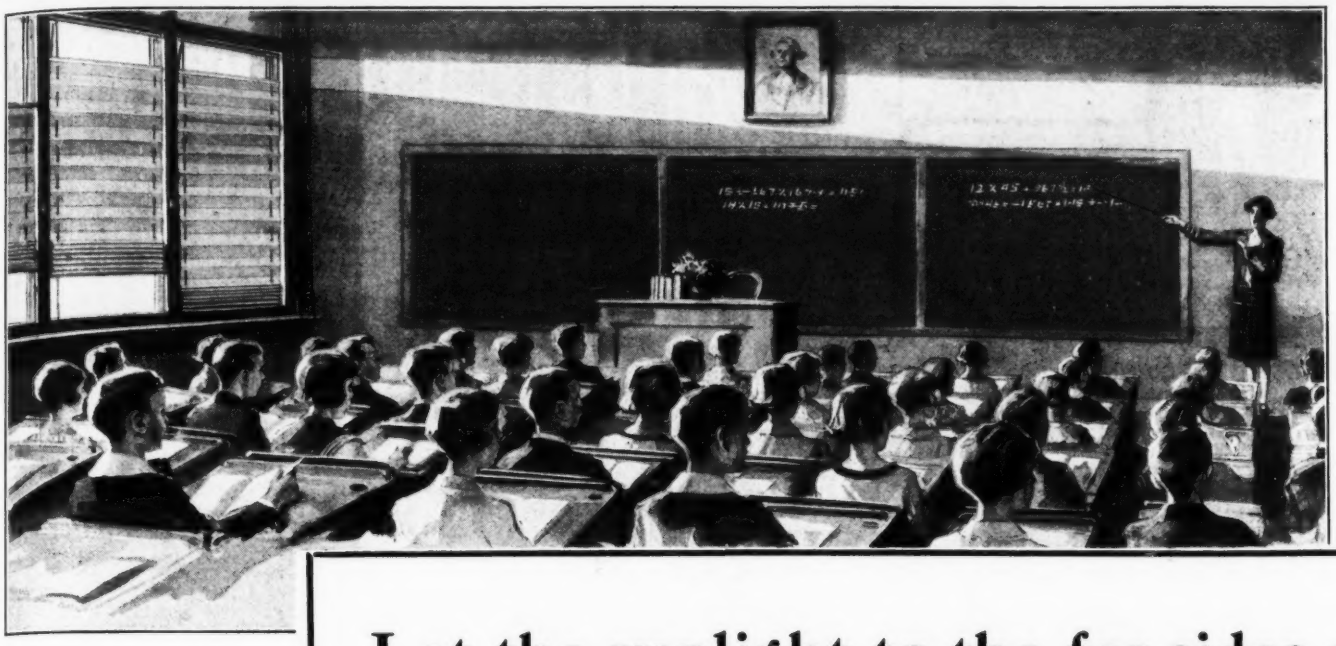
The *Columbia* Mills, Inc.

225 Fifth Avenue, New York

Baltimore Boston Chicago Cleveland Detroit Cincinnati
Kansas City Minneapolis Pittsburgh New Orleans Philadelphia
Portland (Ore.) Fresno St. Louis San Francisco Los Angeles

GUARANTEED

Columbia WINDOW SHADES *and* ROLLERS



Let the sunlight to the far sides of class-rooms — keep the glare from the desks

When the sun shines on the windows, Athey Shades can be partially lowered from the top permitting sufficient sunlight to enter above them to light the entire room—*without the direct rays shining on any desks.* They let in the light yet shut out the glare—two features of prime importance if the eyesight of pupils is considered.

And the cloth of which they are made diffuses a flood of soft, agreeable light even through the portions of the windows that are shaded.

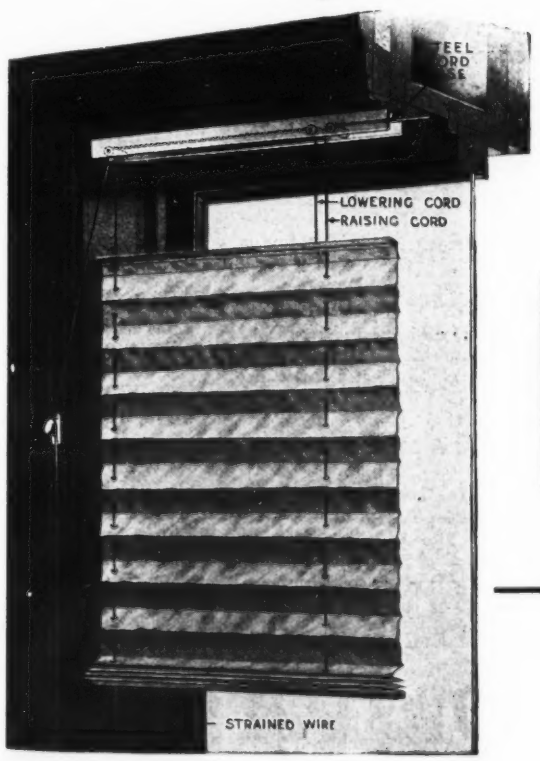
Athey Perennial Window Shades

Because they can be lowered from the top, or raised from the bottom, they afford a control of light which can be had with no other shades.

Running on strained wires they are held taut—even against wind pressure—eliminating any possibility of flapping out open windows, distracting the attention of pupils and tearing.

Considering their long life they actually are the most economical shades obtainable.

A copy of our booklet "Conservation of Eyesight" will be sent, WITHOUT CHARGE, upon request.



The cloth used is a specially woven Coutil-herringbone weave — as near indestructible as cloth can be made. The shades have no latches, catches or springs to slip, stick or break. **Many of the first Athey Shades made — more than 10 years ago — are still in excellent condition.**

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Perennial Window Shades
Cloth-Lined Metal Weatherstrips
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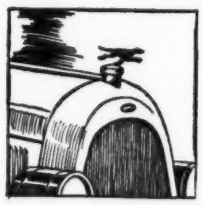
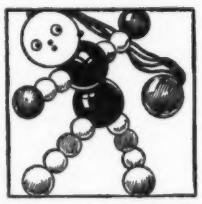
NEW YORK CENTRAL



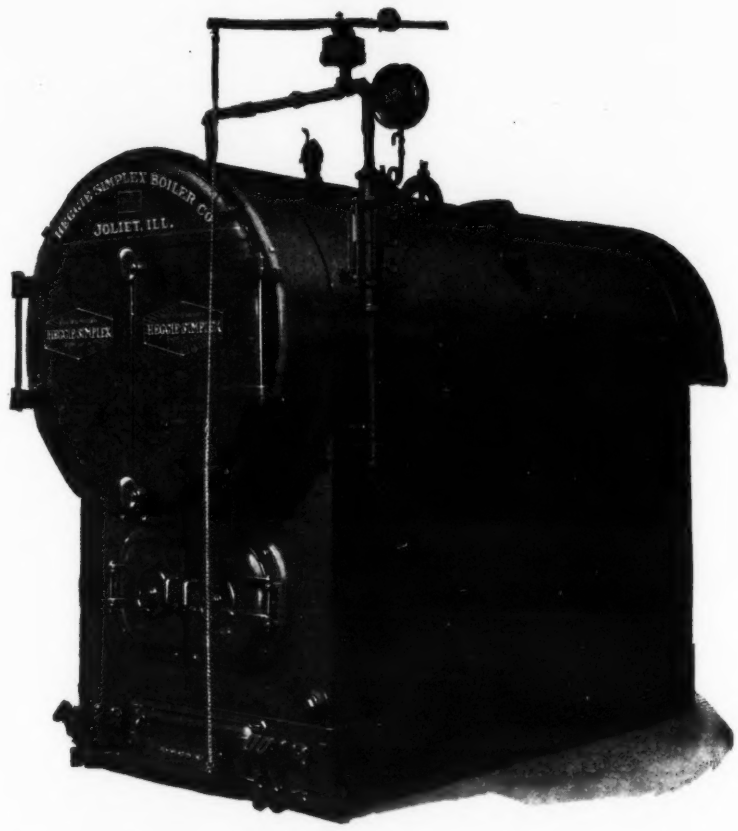
WILLYS-OVERLAND



THE TOY TINKERS

THE CHICAGO DAILY NEWS

GENERAL OUTDOOR ADVERTISING CO.



Leaders Buy From Leaders

LEADING corporations are distinguished for the certainty with which they buy the most modern equipment and secure the most satisfactory service at lowest final cost. That explains why these and many other of America's best known companies are installing Heggie-Simplex heating boilers in steadily increasing numbers. Heggie's 35 years of doing one thing well have culminated in a product whose performance has won their confidence.

Heggie-Simplex Boiler Co., Joliet, Illinois, Representatives in principal cities —telephone and address listed under "Heggie-Simplex Boiler Company."

HEGGIE-SIMPLEX

ELECTRIC-WELDED STEEL HEATING BOILERS

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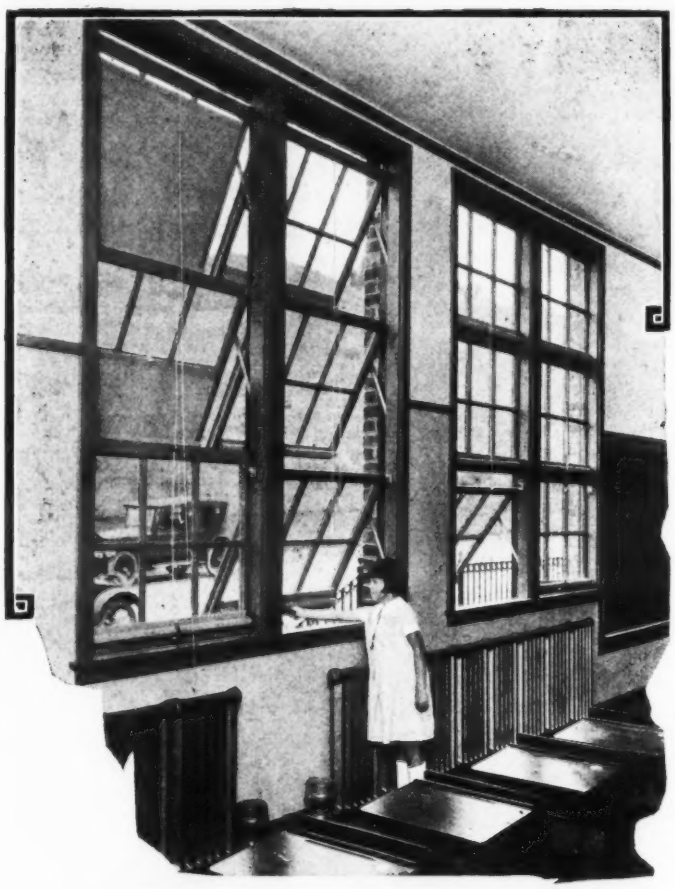
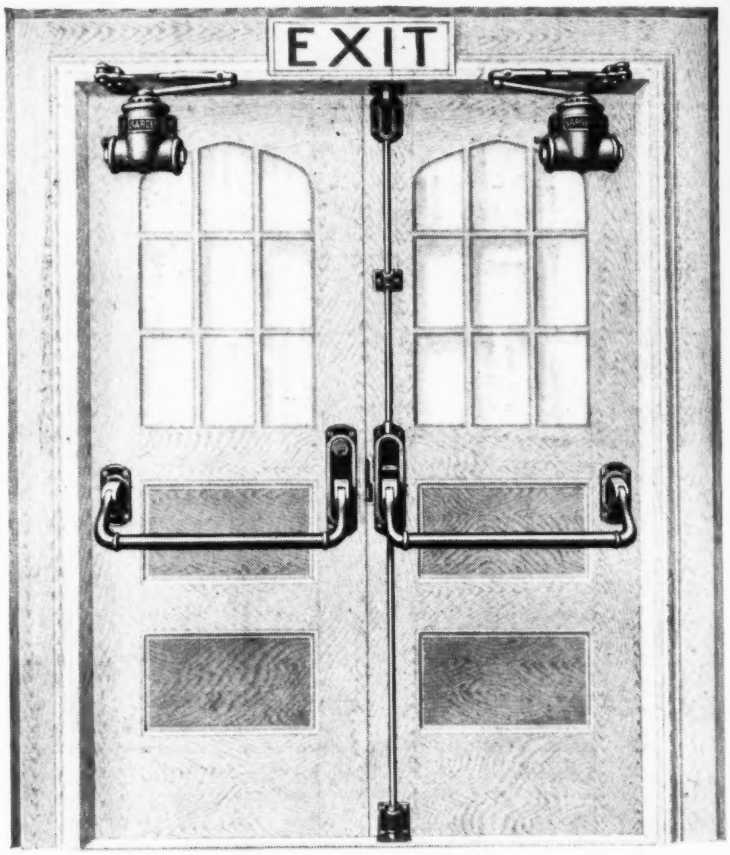
Awning Type Windows Excel for Schools



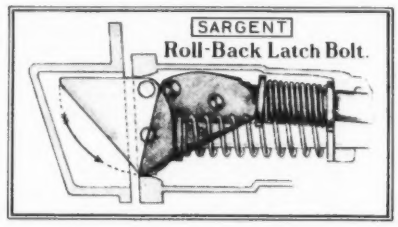
DONOVAN
UNIVERSAL
WINDOWS
AWNING TYPE

UNIVERSAL WINDOW COMPANY
General Sales Office — 1916 Broadway
OAKLAND, CALIFORNIA

A new fire-exit latch bolt that *can't be jammed*



Not even the pressure of a panic-driven crowd can make the Sargent roll-back latch stick



School officials, who are responsible for the protection of the lives of the pupils and are anxious to make proper provision for quick exit in case of fire or panic will be interesed in this new development which has become the standard Roll-Back action for

SARGENT
Fire Exit Door Bolts.

The improved action is shown by the detailed drawing. The Cross Bar does not withdraw the bolts, but releases the deadlocking mechanism, allowing the bolts to be rolled back into the case of the lock as the doors are pushed open.

Security.

The Latches provide complete security and prevent entrance from the outside of the building when the school is not in session, while they can be arranged to permit entrance during school hours if desired.

Quick Exit At All Times.

is provided and in case of necessity the doors can be instantly opened by slight pressure on the handle Bars at any point.

Door Closers

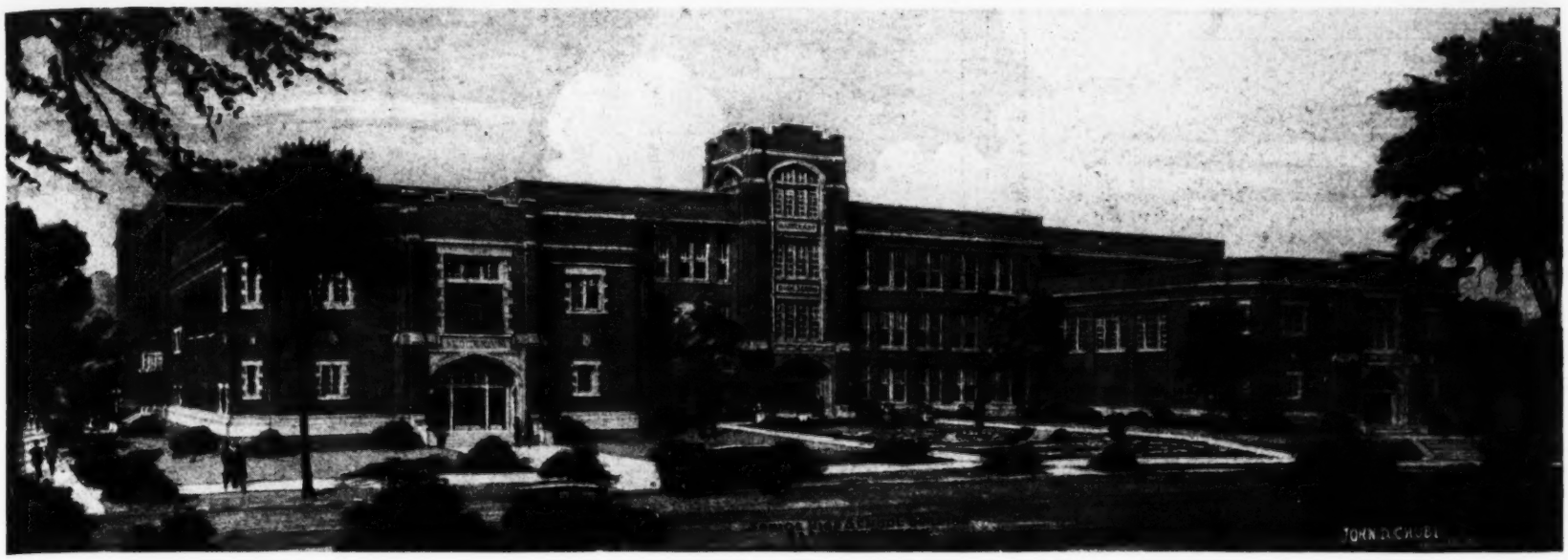
close the doors, during their day by day use, quickly and quietly, the application shown in the illustration with the Sargent special foot (No. 35) being particularly desirable.

Pamphlet illustrating and describing Fire Exit Door Bolts will be mailed upon request.

Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

SARGENT & COMPANY
Manufacturers
NEW HAVEN, CONN.

New York Chicago



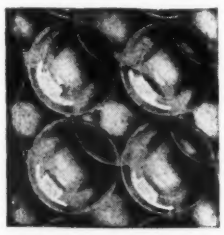
SENIOR HIGH SCHOOL, MARQUETTE, MICH. JOHN D. CHUBB, ARCHITECT, CHICAGO, ILL.

TWO TYPICAL SCHOOL INSTALLATIONS OF

PRESSED LENS GLASS

FOR MORE DAYLIGHT WITHOUT GLARE AT THE LEAST COST

The specification and installation of Pressed Lens Glass in the Senior High School at Marquette and in the Southwest Junior High at Battle Creek, John D. Chubb, Architect, typifies its approval by school boards and leading architects, and its installation in schools throughout the country.



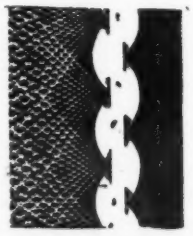
"SCHOOL BUILDINGS PARTICULARLY NEED PRESSED LENS GLASS"

It is made up in sheets up to 50" x 100", also in 4" x 4" tiles glazed in metal bars and stocked by leading glass jobbers everywhere.

Schoolrooms are more perfectly daylighted when Pressed Lens Glass is glazed in the upper exterior sash on East, South, and West elevations. Shades under average seating conditions are seldom required. Light control is established by the use of Pressed Lens Glass since it redirects and transmits the light at any angle. For ceilings, skylights and corridors it has no equal because the light rays are multiplied and projected into all corners, saving the students' eyes by giving them full light for their work.

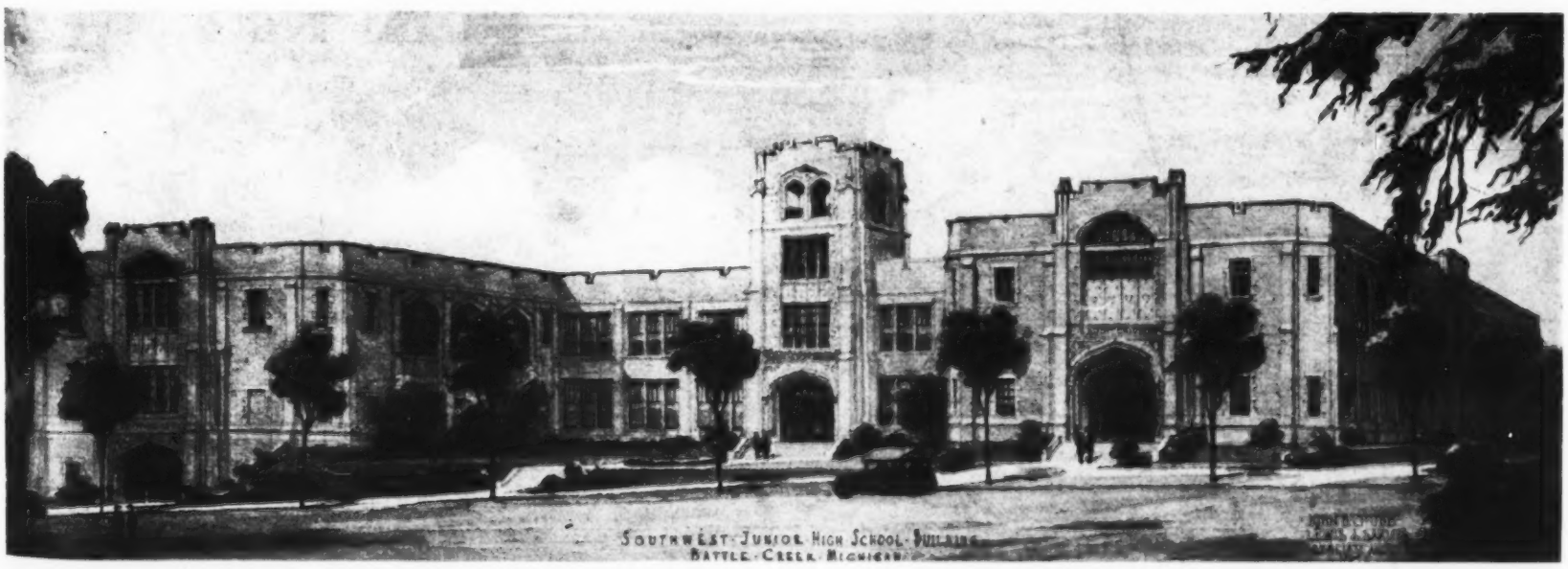
Our service department is ready to help school executives and architects in their problems of daylight refraction and reflection. Sample and estimates sent on request.

SPECIFICATION: *Sheet Pressed Lens Glass ¼ inch thickness as manufactured by the* ***MANUFACTURERS GLASS COMPANY, 1702 First National Bank Building, Chicago, Illinois,*** *to be glazed in the upper exterior sash on the east, south and west elevations, ceiling sash under skylights, toilet room doors and windows, skylights, partition openings, and other openings as shown by plans and specifications, rabbets to be same as for plate glass.*



"TRANSMITS THE MOST LIGHT WITHOUT GLARE AT THE LEAST COST"

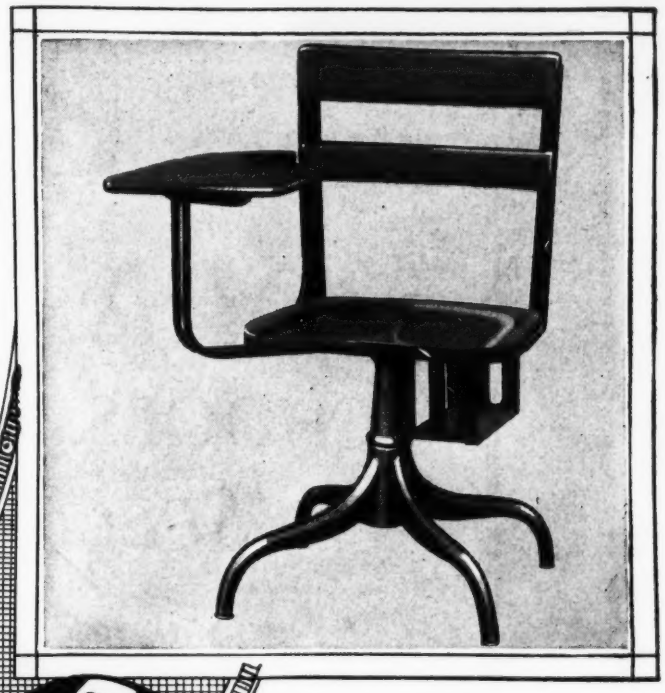
Pressed Lens Glass costs less than half as much as plate glass, and is thus made available for very modest school buildings.



SOUTHWEST JUNIOR HIGH SCHOOL, BATTLE CREEK, MICH. JOHN D. CHUBB, ARCHITECT, CHICAGO, ILL.

"American" Models School Needs

New in Type... Style... Features ... to give better service in High Schools



THE "American" mark on school seats, and seating satisfaction always have been synonymous. Now, two advanced "American" models assure the same degree of satisfaction for High School use. Perhaps *more* important to buyers of school seats is the organization behind those models.

Years of service and experience alone mean little. But when translated in terms of a half century of vigorous growth and application to school seating, they point to perfection in every model. Superior performance. Complete satisfaction to buyer and user alike.

This coupled with thorough Research, exacting Experiment and Craftsmanship has created school buyer confidence. A reputation which concedes the "American" organization leadership in high school seating.

Adjustable Universal Tablet Arm Chair For High Schools

Movable. Adjustable for any height. Hygienically correct. Specially adaptable for the modern needs of high schools. In wide use where movability is required without full desk feature. Recommended specially for socialized recitations. Movable to meet lighting needs. Sturdy, attractive and economical.

High School *Advisory Service* FREE

The "American" organization maintains a Research Department and Advisory Service for the benefit of those who are confronted with seating problems. Without obligation to you they will be glad to submit seating layouts and make recommendations for maximum seating efficiency. Simply write this department and outline your problem. This service costs you nothing.

American Seating Company

14 E. JACKSON BLVD. CHICAGO, ILLINOIS

53 DISTRIBUTORS

in High School Seating

THE FACTORY IS IN MICHIGAN, BUT THE SERVICE IS LOCAL TO YOU

Model No. 301

"Shop Early"

THE words "shop early" mean service to you. They mean you will get the service you expect and the service it is our desire to render.

In anticipation of one of the largest school equipment buying years, The Theodor Kundtz Company warehouses are filled, installation engineers are ready, and we urge the timely placement of orders for school furniture to care for your requirements for the fall school season.

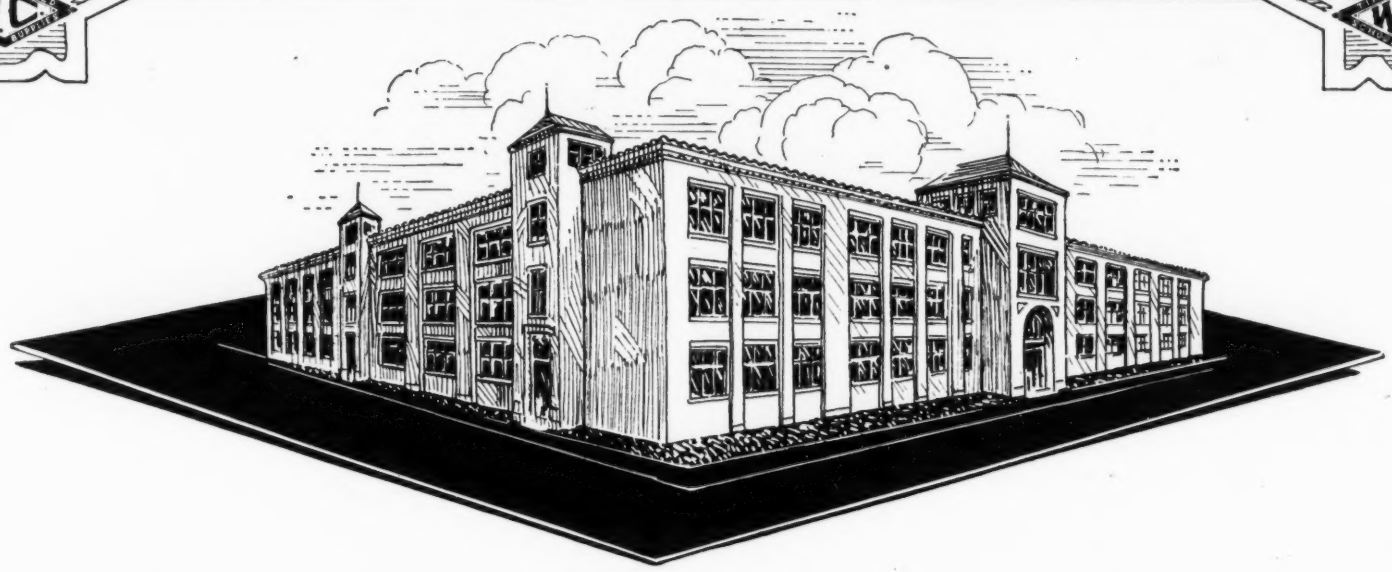
A word from you—and a showing of the complete line of "Eclipse" quality school furniture will be placed before you, so that you may choose desks and chairs most suited for your particular needs.

ECLIPSE

The Theodor Kundtz Co.

Cleveland Ohio

Model No. 200



Permanent as the schoolhouse . . .
Sterling meets the most rigid requirements

Sterling Lifelong Blackboard is all that its trade-marked name implies . . . sterling in performance, life-long in service. A quality product, developed after more than 43 years of specialized experience, 8 years of experiment, and a 3-year test in public and private schools. Warp-proof, buckle-proof and fire-proof . . . time-tested and proved . . . easy to install and with negligible upkeep cost. Black, and black all through, with a finer writing surface that teachers and pupils appreciate quickly. A first cost that is practically its last cost appeals to executives in charge of schoolhouse budgets. Fully guaranteed by the maker and the distributor who sells it. For full details write for free sample and catalog 6S.

Sterling Lifelong Blackboard is today the nationally accepted school blackboard. In 39 states and Canada —in better schools everywhere, it is in use by preference.

STERLING LIFELONG BLACKBOARD

© 1925—WEBER COSTELLO CO.

Sterling Lifelong Blackboard will last as long as the schoolhouse. Decide now to install Sterling, and you have made your last Blackboard choice.

Geographical Globes

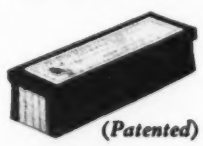
W. C. Globes are specially adapted for school use . . . on desk or table, or hung from ceiling. For 45 years unexcelled in mechanical construction. Imported lithographed maps. Color guaranteed not to fade. Hour circle on each to indicate the time anywhere in the world. 30 styles and sizes. Write for catalog 6G.

Bacon Standard Wall Maps

Larger than others at same prices. Lithographed in 9 colors. Machine-mounted on heavy cloth backing. Engraved to allow a larger map of each country, revised to time of issuing edition. Detail clear and clean. Show comparative time, steamship routes with distances, heights of mountain peaks, and principal railroads. Better, but cost less. 48 x 41—United States, Europe, Asia, Eastern and Western Hemispheres, World, North America, South America, Africa. Write for catalog 6B.

Costello Double Sewed Eraser

Sanitary, easy to keep clean. Reinforced back prevents curling up, spreading, or breaking down in use. No "pockets" between felts for dust to enter. Nothing but felt used in its construction. Noiseless. Works better, lasts longer. Chosen by school boards everywhere. Guaranteed perfect. Write for catalog 6E.



(Patented)

Alpha Dustless Crayon

Patented 57 years ago. Uniform high quality, made of high-grade imported materials in a special factory . . . no soap, grease or other ingredients harmful to blackboards used. Durable, dustless, sanitary, writes clean and clear. Extra strong. In "hard," "medium" and "soft." Very economical. Write for catalog 6A.

Weber Costello Co. Chicago Heights Illinois

Insures Correct Posture—

"More Comfortable—More Convenient"—

From One Superintendent to Another —

Supt. W. J. Hamilton, of the Public Schools of Oak Park, Ill., writing to Supt. B. O. Skinner, Marietta, Ohio, said of the National Semi-Steel Desk with Moeser Extended Arm:

> "The arm rest on the desks is the best thing that we have found to insure correct posture, and the pupils assure us that the seats are more comfortable and more convenient for desk work through the addition of this arm rest. Our Board is placing a large order for further installation of this type of desk."

The tendency of the average school desk is to force the pupil **to twist in the seat and to face the light.**

These disadvantages tend toward the development of—
Spinal Curvature–Defective Eyesight–Nervous Disorders

By the use of the Extended Arm Rest, we obviate all necessity for the pupil twisting in the seat and facing the light in order to secure support for the arm when writing; also greatly increase the usable writing and working surface.

The Moeser Supporting Arm Top can be furnished with any National School Desk.

A Wonderful Finish That Won't Scratch

In our factory we have developed, by a secret process, a remarkable high-grade acid finish, by which the coloring of the wood is brought to the surface and deposited, producing a soft brown shade or finish that will not fade nor discolor; which is very pleasing, harmonizing with any interior; which is permanently water-proof and practically scratch-proof under all ordinary working conditions.

We make and substantiate this claim—

That woods treated by this process wear longer and retain their original finished appearance longer than with any other finish.

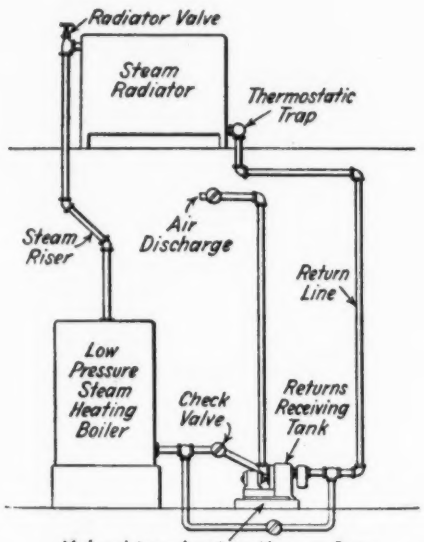
You will be interested in our Catalog and Circulars on National School Equipment.

THE NATIONAL SCHOOL EQUIPMENT CO.
Manufacturers of Complete School Equipment
PORT WASHINGTON, WIS.

Pupils using Desks equipped with the National Extended Arm Rest. The back is supported; they have adequate writing space with proper arm support; they look straight forward, without twisting—the posture is comfortable, convenient and healthful.

NATIONAL School DESKS

"Famous for Comfort"



Motor-driven Jennings Vacuum Pump
(Combination vacuum and condensation pump)

Above, a diagrammatic installation of the Jennings Vacuum Heating Pump. Steam, generated in the boiler, flows to the radiators, where it gives up its heat and is condensed into water. Under the action of the vacuum created in the return line by the pump, the condensation and whatever air may be present in the radiators are withdrawn through the thermostatic trap and passed to the return tank. From here, the air is removed and discharged by the pump into the atmosphere; the condensation is pumped back into the boiler.

The pump operates automatically — removing water and air only when the water reaches a predetermined height in the return tank, or when the vacuum in the return line falls below a fixed minimum.

BULLETIN NO. 52
CENTRIFUGAL PUMP

For (a) circulating hot and cold water, (b) boosting water pressure to supply top stories in tall and even moderately high buildings, (c) promoting circulation in pressure hot water heating systems, (d) circulating water to and from swimming pools.

BULLETIN NO. 67
SEWAGE EJECTOR

For automatically raising sewage and drainage from basements below street sewer level, where disposal by gravity flow is not available.

BULLETIN NO. 71
VACUUM PUMP

For withdrawing the condensation and air from the return line of the vacuum steam heating system, discharging the air to the atmosphere, and pumping the condensation back to the boiler.

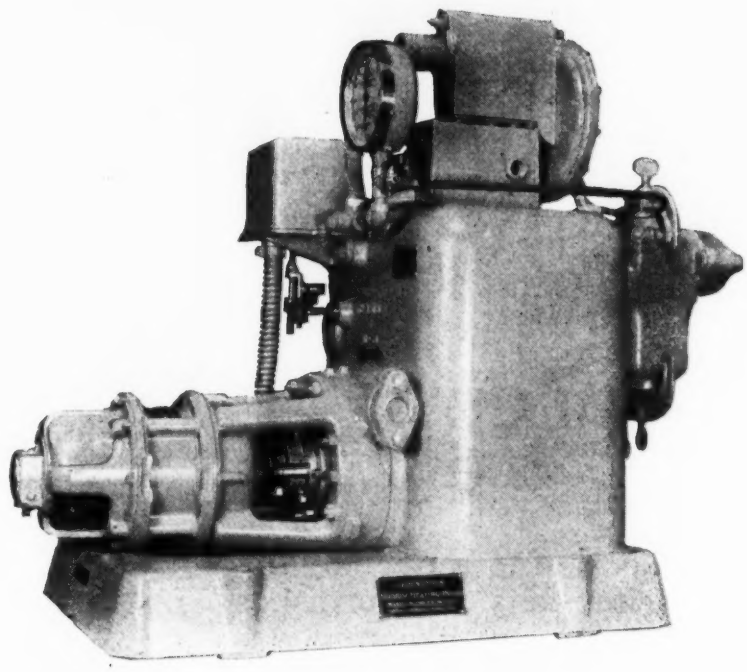
BULLETIN NO. 25
VACUUM PUMP

For small return line vacuum steam heating systems having up to 5,000 sq. ft. equivalent direct radiation.

BULLETIN NO. 63
CONDENSATION PUMP

For receiving the condensation from steam radiators, particularly radiators set below the boiler water-line level, and pumping the condensation back to the boiler.

This celluloid graphic device, with movable rotor, clearly illustrates the operating principle of the Jennings Pump. Gladly sent on request.



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By installing the Type T Jennings Vacuum Pump, you can give your small heating jobs—jobs of less than 2,500 sq. ft. radiation—the same economies, the same flexibility and dependable satisfaction, as your big school jobs on which the larger Jennings Pumps have been so universally used during the past seventeen years.

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6. Furnace firing is easier and less frequent.
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Consider these advantages carefully. Think what they mean in the way of better, more economical performance, *thorough satisfaction.*

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Jennings Pumps

RETURN LINE AND AIR LINE VACUUM PUMPS CONDENSATION AND CIRCULATING PUMPS

THE AMERICAN
School Board Journal
A Periodical of School Administration

Frank Bruce, Publisher
John J. Krill, Business Manager
Frank O. Dunning, Jr., Eastern Manager

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A School Service Plus

THE reader of a class journal may find that while his favorite publication provides a fund of information which is of real service to him, it may fail to answer for the moment the immediate question which is in his mind. The question may have been answered several times in previous numbers of his magazine, which he either overlooked, or which at the time was of no particular value to him.

Information is, of course, of greatest service if provided at a time when it is really wanted. Thus, the school official who has a special problem before him will write the editor for just such information as he may require. The editorial department of the AMERICAN SCHOOL BOARD JOURNAL has answered many questions in the course of the year which are directly submitted by correspondents.

The service rendered has included a wide range of questions along school administrative lines. It has dealt with the scope and function of boards of education and superintendents, with financial problems, and with architectural and building considerations.

During the past year the editorial department has provided special information on such problems as the planning and equipping of cafeterias, swimming pools, athletic fields, gymnasiums and auditoriums, on heating and ventilation, on janitor and engineering service, on budget making and financial statements, on corporal punishment, schoolhouse dedications, graduation exercises, etc., etc.

This service is rendered without compensation —gladly and cheerfully.

—THE EDITOR.

SUMMER ADDRESSES

Changes of address for the summer should be sent promptly to the subscription department, AMERICAN SCHOOL BOARD JOURNAL, 129 East Michigan Street, Milwaukee, Wisconsin. Please include old as well as new addresses so that errors may be avoided.

TITLE PAGE AND INDEX

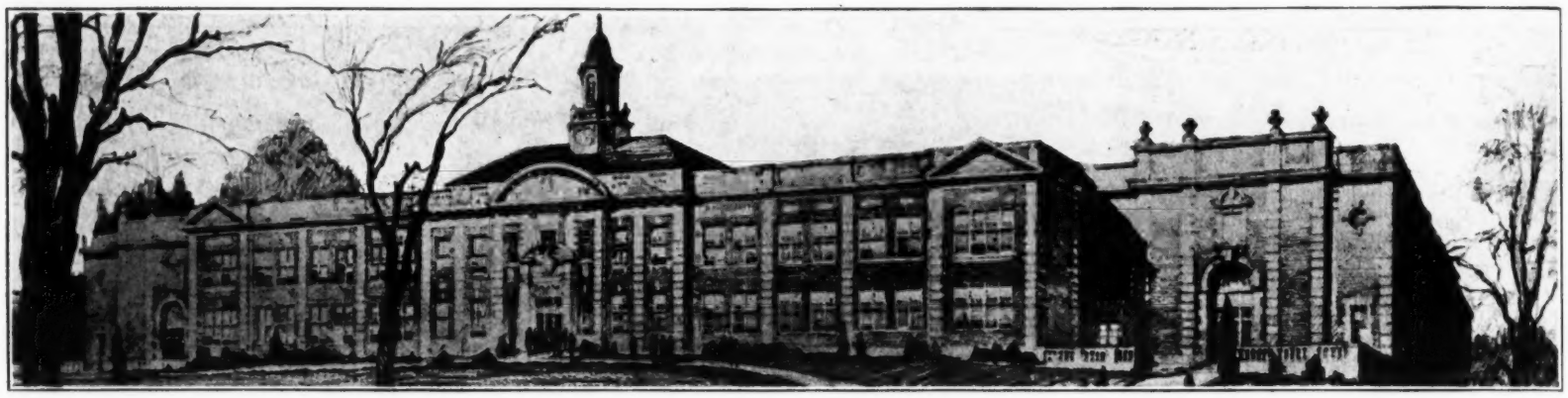
This issue contains the semi-annual title page and index for the convenience of subscribers who bind the JOURNAL.

Subscriptions—In the United States and possessions, $3.00 per year. In Canada $3.50. In foreign countries $4.00. Single copies, not more than three months old, 35 cents; more than three months old, 50 cents. Sample copies, 35 cents. No orders accepted for volumes dating back more than five years. Back copies more than one year old, not available.

Discontinuances—Notice of discontinuance of subscriptions must reach the Publication office in Milwaukee, at least fifteen days before date of expiration. Notice of changes of address should invariably include the old as well as the new address. Complaints of non-receipt of subscribers' copies cannot be honored unless made within fifteen days after date of issue.

Editorial Material—Manuscripts and photographs bearing on school administration, superintendence, school architecture, and related topics are solicited and will be paid for upon publication. Contributions should be mailed to Milwaukee direct, and should be accompanied by stamps for return, if unavailable. Open letters to the editor must in all cases contain the name and address of the writer, not necessarily for publication, but as evidence of good faith.

What Stamford Chose



Architect: Knappe & Morris, New York City.
Electrical Contractor: J. E. S. Barker, Bronxville, N. Y.

NEW HIGH SCHOOL, STAMFORD, CONN.

Engineer: Wm. H. Dusenbury, New York City.
General Contractor: E & F Construction Co., Bridgeport, Conn.

WHEN the new Million-And-A-Half Dollar Stamford, Connecticut, High School was being planned unusual care was exercised in the choice of all equipment.

It was early determined just what type of Electric Time Equipment, Fire Alarm Equipment, Telephone System, Laboratory Equipment, etc., would be most suitable.

The final choice was not left to the contractor, but was decided by the Building Committee, of which Judge F. B. Bartram was Chairman, cooperating with Superintendent of Schools Joseph A. Ewart.

Their choice, after thorough investigation and consideration, was a complete STANDARD ELECTRIC TIME COMPANY'S SYSTEM.

As the equipment of this fine school is one of the most complete and up-to-date in the United States, we believe it will be of interest to many readers to give a condensed summary below:—

Master Clock
Eight-circuit Program Clock
106 Round Metal Secondary Clocks
102 Classroom Telephones and Desk Telephones for Principal's Office
One Master Code Fire Alarm Station
Twenty-six Break Glass Stations
Twenty-six Fire Alarm Cow Gongs
106 Buzzers and Bells in Classrooms
13 Corridor Bells
Large-sized Tungar Rectifier and Charging Panel
Automatic Charging Device for Charging Battery
12 Cells of ET Storage Battery in Special Cabinet
Special Science Room Equipment
1—48" Dial Tower Clock with Automatic Lighting Attachment

One One-Hundred-and-Thirty-Point Bell Control Board and Telephone Central Station.

Stamford has always used Standard Electric Time Equipment and within the past two years has made additional complete installations in Four of its schools, making a total of Six schools now equipped with Standard Electric Time Systems, in addition to the above.

THE STANDARD ELECTRIC TIME CO., Springfield, Mass.

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50 Church St., New York
1725 Sansom St., Philadelphia
229 Pine St., Portland, Ore.
690 Market St., San Francisco
148 Adams Ave., Scranton
918 Western St., Seattle, Wash.
28 East Sprague Ave., Spokane, Wash.

[*"Makes Every Minute Count"*]

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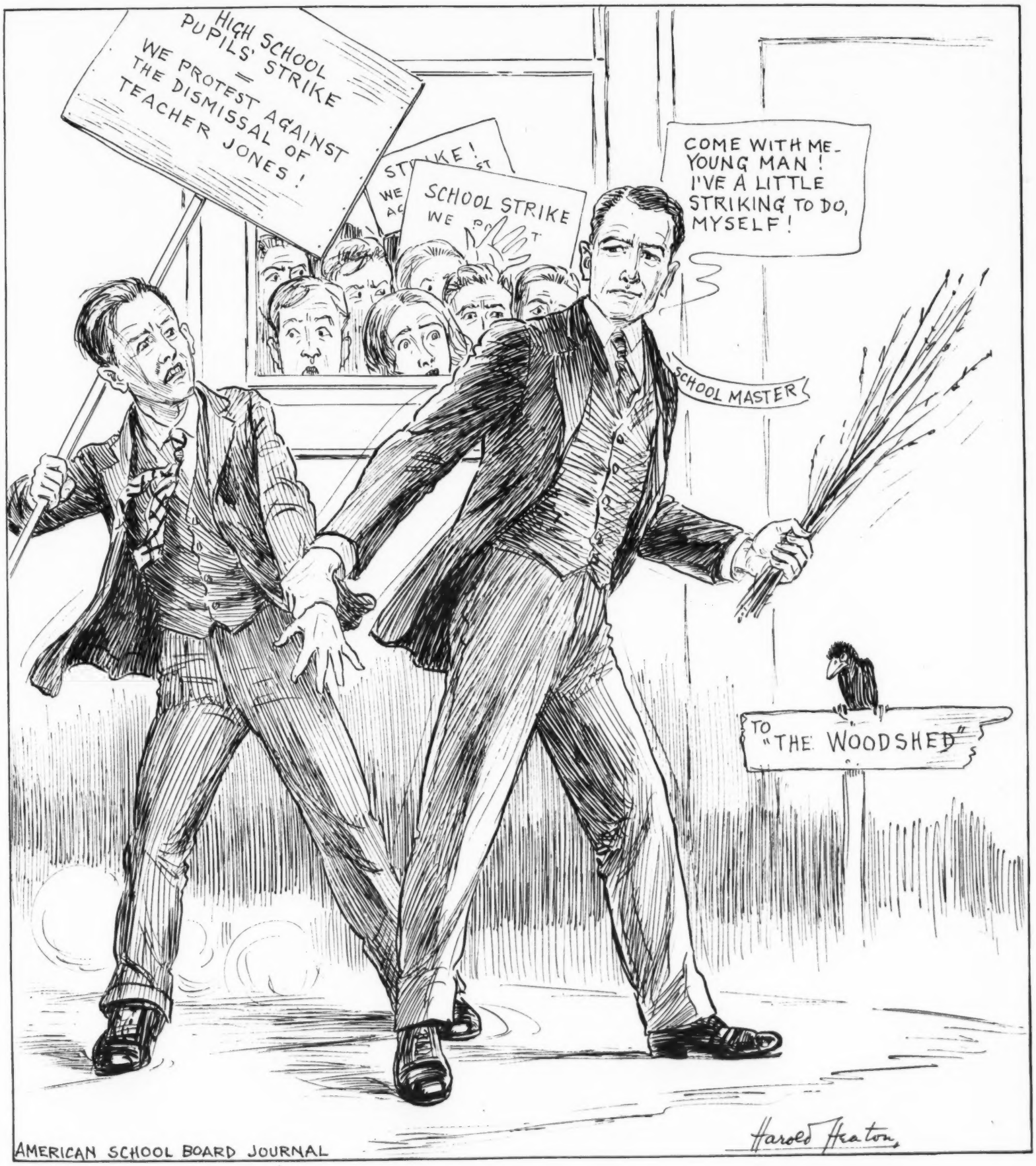


One Strike Deserves Another!

Superintendent Standard and the Educational Revolution

V. H. Culp, Professor of Rural Education, Northern State Teachers' College, Aberdeen, S. Dak.

Superintendent Standard had been asked to speak at the weekly Rotary Club luncheon. He informed the secretary that his subject would be "The Educational Revolution." During the next few days the school official thought much regarding the contents of his address, for he desired to prove his case, and at the same time convince his fellow club members of his grasp of educational affairs.

The day of good fellowship came and the head of the city schools was introduced with the usual extravagant remarks. A satisfying dinner combined with the fragrant aroma of tobacco make an appreciative audience. The spontaneous applause ceased when Mr. Standard rose to his feet.

"Fellow Rotarians, I trust that the meeting may remain informal. Feel free to interrupt me with questions or comments. My subject sounds as if I were a representative from Soviet Russia, but I assure you that my remarks will not be flavored with communistic propaganda. It is not my purpose to make you dissatisfied with your American citizenship or your membership in this club, but rather to lead you to think regarding the goal of present tendencies in American education. I bespeak of a day when education will follow the lead of industry and agriculture in materially reducing the time and cost elements in the preparation of the finished product.

Teaching Must Be Professional

"It is a long way from the oxcart to the automobile, from Franklin's printing press to the great offset presses of today, from the shoemaker of colonial times to the shoe factories of our day, and from the scythe to the modern harvesting machine. In the industrial and agricultural fields we have had a great revolution and as a result the time and cost of production have been decreased while the production per person and wages have been greatly increased. Such changes have not occurred in the educational world, largely because of low standards of attainment, low salaries, the utter lack of preparation on the part of the teachers, the influence and demand of unprogressive schoolmen, unnecessary requirements by institutions of higher learning, and last but not least, by the pernicious and constant influence of politics in our schools. The last influence alone has undoubtedly retarded the advance of education for a generation.

"It is to be hoped that teaching will soon become a profession when the minimum qualification of a teacher will be a collegiate degree. Gentlemen, it takes just as much ability and skill to teach in the grades as in the high school. Salaries should be based on training, experience, and success. If we were to make a course for physicians who planned to treat diseases of children *only*, not nearly so difficult nor so thorough as for the doctor who planned to treat adults *only*, and make the compensation less for the former than the latter, we would be following precisely the same idea in the medical world that is now being practiced in the educational world. Anyone can see plainly the asininity of such a course. The teacher of tomorrow must be thoroughly trained and because of his increased efficiency he will be entitled to a larger share of the spoils of trade and industry. Considering the preparation of our teachers it is surprising that our results are as satisfactory as they are. This is due largely to the fact that some pupils will acquire an education under any methods, or no methods at all."

"Professor, I'm a taxpayer, and I'll declare the limit has been reached," quoth a member near by.

The answer that Superintendent Standard gave surprised the whole group, even more than the unexpected comment.

Cost vs. Instruction Methods

"You are right! The cost of government, education, medical assistance, and justice, must be greatly reduced. Of course, I should tell you that the method of raising taxes and the distribution of public money is wasteful, awkward, and unjust. But that is another question. When standards and salaries have been sent skyward, we will be ready for the revolution. In the first place our present system of grades and recitations must be discarded the same as the scythe, the hand printing press, and the oxcart.

"Our system of assigning children to grades, the organization of courses, the giving of marks and procedure in the class make the school a medieval institution. There is too much variation of ability in each of the twelve grades, many courses are too impractical, too much time is wasted, and usually marks mean little or nothing. Besides, mass instruction is unpedagogical because learning is an individual matter. When possible homogeneous groups will be formed for efficiency in the appreciation subjects and for the purposes of social training and physical exercise. The real work of the school in mastering what we consider academic knowledge will be individual."

"Say, Henry," interrupted one of the bankers of the group, "I am interested in that talk about lowering the cost of education." (Laughter.)

"Very well, Bill, since you insist, I'll proceed to ring the cash register." (Applause.) "This may be done in at least four ways.

"First, the time for finishing the twelve grades will be reduced by about two years. The lock-step idea of marching to the tune, 'It Takes Twelve Years' is ridiculous. We might as well say that all horses shall run a mile in five minutes. Some could easily do it, some would have to hustle, and others would fail to do so. Why put in the time limit as long as they cover the distance? Let us make *work mastered* the basis for graduation instead of so many years of attendance and so much work. This lopping off of two years would be a great saving in the cost of education. The subject matter will have to be reorganized, some material will be eliminated, other material added, and the whole curriculum will have to be highly motivated.

Some Means of Economy

"Second, the number of pupils per teacher will have to be increased, especially in rural and town schools and in the upper grades. The number will have to be determined by scientific research, but rest assured the small number of pupils to a teacher in many courses will be changed. The teacher of the future will possess such a well-rounded education that he will be able to do a number of things well and at the same time be a specialist. The teacher will not be an assistant policeman, but rather a director of the group. He will assist them over difficult places, help them with exercises, test them, examine the projects completed, suggest methods of attack, and help with practical applications. A spirit of work will permeate the whole school, and the joyride of today will end.

"Third, the overhead expense, numerous supervisors, and special teachers will be largely eliminated, because teachers will be specialists and the work will be organized along different lines. A superintendent to coordinate the work and a business manager in the large units will be the only necessary employees outside of the regular teachers.

"Fourth, much money will be saved in the construction of school buildings. The buildings of the future will be less expensive, the laboratories will be larger, there will be more apparatus, more reference material, and more provision for recreation. It is possible that the schools may soon take over the recreation and amusement programs of the community and operate them on a small profit-yielding basis. Bond issues which now make buildings cost about twice what the taxpayers vote will be discontinued because it is an unsound business practice."

"Just a moment, Henry," said the owner of a group of motion-picture theaters, "that statement about the schools taking over recreation sounds a little like Russia." (Laughter.)

"Walt, the school officers are not desiring the added responsibility. It is the public that is forcing our schools and the city government to take over many activities that were once considered private. We already have our public parks, golf links, swimming pools, library, etc., and the end is not yet. As time goes on we shall have to give up certain privileges in order that we may enjoy others. It is the demand of a complex civilization.

"In closing, I wish to appeal to you as the fathers of our school children. It is for your children that we are conducting the schools. Give us thoroughly trained teachers, eliminate politics from our school system, and follow the lead of scientific procedure, and you will behold the new educational era."

Measuring School-Board Candidates

It has frequently been urged that the selection of school-board members ought to be subject to certain standards and measurements. L. W. Hacker of the Illinois State Normal University has worked out what he calls a measuring stick for school-board candidates in the rural districts. He sets forth the several qualifications and provides a score card, as follows:

Thirty-eight qualities in the character of a desirable school-board member are listed below. To aid in judging or selecting the best candidate for your school board this device will prove helpful. Assign points according to the following: Superior, 5; above average, 4; average, 3; below average, 2; poor, 1. Scores for members will vary from 38 to 190. Those receiving scores from 38 to 70 are poor; 70 to 100, below average; 100 to 130, average; 130 to 160, above average; 160 to 190, superior.

Board members' initials or numbers or name.....

I. *Personal Traits and Qualifications*

1. Fair minded; not governed by prejudice..
2. Approachable, cordial; not forbidding or unfriendly .....
3. Dependable, honest, not vacillating, "two-faced," nor "grafter".....
4. Weighs matters carefully, does not jump at conclusions .....
5. Courageous, faithful, not too sensitive to criticism .....
6. Reasonably successful in his own business, not a failure.....
7. Progressive, not opposed to needed changes .....

II. *Training and Breadth of Information*

1. Fair training, not insufficient educational qualifications .....
2. Reads standard papers, magazines, not cheap questionable literature.....
3. Knows needed school program in state, county, and community, not ignorant as to organization administration, taxation and distribution of school funds.....
4. Knows advantage of larger school unit, not favoring small inefficient schools.....

(Concluded on Page 157)

Effective Factors in the Growth of Teachers in Service*

Frederick L. Whitney, Director Department of Educational Research, Colorado State Teachers' College, Greeley, Colo.

It is assumed that no teacher-training institution claims to graduate a finished product, even after four college years of preparation interrupted, it may be, by periods of valuable experience in the field. If we are to claim to be members of a profession, we must hold to the necessity for and the possibility of continuity of training so long as growth is maintained.

The view here offered is that the teacher-training institution and the public-school system have joint responsibility in providing for continuous development in professional attitude and teaching skill. The training institution makes and administers its intramural curriculum on the basis of knowledge of needs in local systems served. It makes and offers an extramural curriculum which is applied in the local system with the consent of the administration and the cooperation of the supervisory staff. The local staff has also its learning-while-teaching curriculum which is adminstered through supervision.

Progress in Improvement of Teachers in Service

The suggestion is that, if the teacher-training institution and the local system will join forces and will unify into a single curriculum all teaching activities which have as their purpose the continuous growth of teachers on the job, more progress will be made, many teachers will be rescued from complete failure, and many will be saved from functioning on a low level of skill when they are capable of serving on a higher level.

Projects for Encouraging Growth of Teachers

It would not be difficult to find illustrations of cooperative projects like this. I am sure all of you know of such in the west. The recent Century book, *The Growth of Teachers in Service*,[1] describes several cases among small towns in Minnesota. In one of them, the publication of a cooperative survey resulted, *A Survey of the Rustad Consolidated School*.[2] At the recent Dallas meeting of the National Educational Research Association, a fine illustration came to my attention. Doctor Gray of the University of Chicago gave an account of cooperative work which has been in progress among two groups of Illinois systems for some time. (This is published in the *Journal of Educational Research*[3] and summarized in *The Teachers' Journal and Abstract for March.*) The specific purpose was to reorganize and improve instruction in reading in harmony with the findings of research. The work was undertaken because of the conviction of the Research Committee of the Commonwealth Fund, from whom a grant had been received, that the "scientific study of fundamental problems is going forward more rapidly than the actual utilization of the products of research in the improvement of school practice."

The school systems cooperating included widely differing social and administrative conditions. Mr. Gray says: "The members of the first group differ primarily in the size of the administrative units represented and in the types of supervision provided. The schools of Rock Island, Illinois, a city of approximately forty thousand, belong to the first group. The supervisory staff includes a superintendent, two grade principals, and eleven elementary-school principals, most of whom do little or no teaching. The five schools of Wilmette, Illinois, which are supervised by the superintendent and one principal, together with a six-room village school in Thorton, Illinois, supervised by a principal who teaches full time and by a rural supervisor, and Cook School, Rock Island County, which is under the supervision of a county superintendent, complete the group. The second group includes five schools representing widely different racial, social, and economic conditions. This group comprises a school in the heart of the colored belt in Chicago; another under the shadows of the steel mills of South Chicago, which is attended by foreign-speaking children of many nationalities; a school in Chicago Heights attended by American-born children of the second and third generations; and two schools in Evanston, Illinois, attended to a large extent by children from homes of culture, refinement, and wealth. Four schools also serve as control centers, and more than two hundred teachers are actively cooperating in the study."

The Purpose and Scope of the Project

The project has been in process for two years, beginning in the fall of 1925. The specific aims are given by Mr. Gray as follows: "The effort was made to procure for the principals, the supervisors, and the teachers a broad vision of the social objectives of reading, a clear understanding of the relation of reading to each school activity, and a knowledge of needed changes in current practices, together with the evidence that justified them. An attempt was made to awaken interest and enthusiasm for valid reforms in reading instruction and thus to secure cooperation, initiative, and creative effort on the part of every teacher. The development of an objective attitude toward the problems of reading, with skill in the use of necessary technics, was sought in order to lay the foundation for continuous, intelligent study and progressive reorganization and improvement of reading instruction."

It is not necessary to give the details of procedure in this cooperative supervisory experiment. That the purpose of supervision is better teaching and that supervision and teacher training in service are identical activities is recognized by Mr. Gray when he says: "The results of the investigation thus far show conclusively that it is impossible to accomplish any vital reorganization of instruction without a sympathetic, vigorous program of teacher training." Inevitable unity of effort, if identity of objectives is effected, is recognized in his remark that "the reorganization of instruction in reading is not only a function of service, but an activity of research as well." Thus, an assumption of joint responsibility for continuity of training so as to effect continuous growth of teachers in service acts and reacts in teacher-training institution and in the local system, stimulating both to more effective work in their distinctive functions and benefiting classroom instruction and the service of all other types of school affairs by starting teachers at a higher level of activity in the public-school system, and by insuring steady development in professional attitude and skill up to the point of individual possibility.

Evaluation of Items of Technic in Teacher Training

It will be logical to report at this point items of technic of teacher training actually engaged in by both teacher-training institutions and local public-school systems, and to attempt their evaluation in the light of practical experience and what is known about the laws of learning. Reports have been received from some 40 school systems in communities of under 5,000 population with 2 to 102 teachers and from about 75 in cities of 5,000 to 2,000,000 population. The small systems are nearly all in Minnesota. The larger cities are widely scattered from North Dakota to Oklahoma and from Rhode Island to the Pacific coast. Four California cities are in the larger group: San Jose, Fresno, Berkeley, and Sacramento.

Reports of the practices of teacher-training institutions in attempting to effect a continuation of teacher-training and teacher growth after graduation are found in Table I. These include the facts from 71 per cent of all state normal schools and state teachers' colleges in the United States and Hawaii. Every state is represented having either state normal schools or state teachers' colleges with the exception of Florida.

TABLE I

TECHNIC OF TEACHER TRAINING IN SERVICE USED BY 138 STATE NORMAL SCHOOLS AND STATE TEACHERS' COLLEGES IN 44 STATES AND HAWAII

Rank 1	Item 2	Frequency 3	Per Cent 4
	No plan reported	45	33
1	Extension courses offered	41	30
2	Correspondence courses offered	22	16
3	Full-time field workers to visit alumni and supervise	19	14
4	Irregular faculty visitation among graduates	17	12
5	Success reports from superintendents	15	11
	Shall develop some plan in the future	14	10
6	School bulletin or paper published	11	8
8	Informal correspondence with graduates	7	5
8	Alumni secretary, or alumni list checked each year	7	5
8	Research department or bureau	7	5
10	Alumni reunions and home comings	6	4
12.5a	Placement-bureau work	3	2
12.5b	Conferences or institutes at the home school	3	2
12.5c	Definite plan made for the near future	3	2
12.5d	Inquiry among alumni about the value of content and management of courses at the home school	2	2
15	Appointment committee work	1	1

The Judgment of Fifty Teacher-Training Specialists As to the Desirable Rank Order of Eighteen Levels of Teacher Training in Service

Rank	Item
1	Supervision by full-time field workers.
2	Regular visitation first year after graduation.
3.5a	Annual inspection by faculty members.
3.5b	Extension courses.
5.5a	Annual professional conference for all graduates.
5.5b	Surveys or investigations made by bureaus of research.
7	Correspondence courses.
8	Irregular visitation on request from the field.
10.5a	Activities of full-time alumni secretary.
10.5b	Success reports first year after graduation.
10.5c	Scientific activity analysis of teaching jobs.
10.5d	School bulletin or paper mailed to alumni.
13	Placement bureau work.
14	Appointment committee activities.
15	Alumni list checked each year as to location and job.
16	Inquiry among alumni about value of content and management of courses in the home school.
17.5a	Irregular correspondence with home faculty.
17.5b	Alumni reunions.

The most significant fact in the table is, perhaps, that one third of the institutions have no plan at all for following their graduates into their teaching work after graduation. In fact, in connection with another study, it was found that a great many of these institutions did not know the addresses of their graduates, even those of the year before, and many could not be stimulated to try to find them. A hopeful phase of the checking reported here is found in the fact that, in the letters coming from the 138 institutions, but one disclaimed all responsibility for continuation training, implying that a finished product was furnished to public-school systems. Further, item 12.5c reports three institutions as having definite plans ready for use in the near future.

*An address delivered before the Spring Conference of School Executives and Supervisors of Southern California at the State Teachers' and Junior College, San Diego, California, April 30, 1927.

[1] Whitney, F. L. **The Growth of Teachers in Service.** The Century Company, 1927.

[2] Wright, E. E. and Whitney, F. L. **A Survey of the Rustad Consolidated School: A Report of the Study of a Typical School Situation in the Red River Valley,** Bulletin of the Moorhead State Teachers' College, Moorhead, Minnesota, July, 1923.

[3] Gray, W. S. "A Study of Ways and Means of Reorganizing and Improving Instruction in Reading," **Journal of Educational Research,** March, 1927.

Determining the Merits of Teacher-Training Methods

In order to get the judgment of thinkers in teacher training on the relative merits of their methods, the list was submitted for ranking to a jury composed of presidents, training-school men, and heads of departments of education in a number of leading state normal schools and state teachers' colleges. Their composite ranking appears at the bottom of Table I.

It is evident that the basis of decision is found in nearness of actual supervisory contact with teachers on the job. Use of a full-time supervisor is thought to be the most desirable plan. If this is not possible, faculty members should be sent out as widely as funds will permit to check up success levels. (Items 2 and 3.5a.) Extension courses are ranked next, and an annual conference of all graduates at the home school and the work of a bureau of research are thought to be on about the same level of usefulness. An annual conference is possible, of course, only when both graduate list and area served are small. Castleton, Vermont, has two such professional conferences each year. Such items as alumni reunions and correspondence with faculty are thought to be least valuable of all, and it is surprising to find both scientific and informal analyses of our teacher-training criterion (items 10.5c and 16) ranked so low. Very likely, while the ultimate effect of such analyses upon the curriculum is recognized, it is not fully understood how the teaching level among graduates would be thereby raised.

The ranking of four prominent presidents of large state teachers' colleges may be used as a check upon the opinion of the group of specialists reported above. These four educators, who have been trying for years to administer teacher-training efforts before, and after graduation, so as to insure a high level of success in teaching among alumni, agree with the group of fifty that most valuable of all is personal supervisory contact, in particular during the first year after graduation. But for the third item, instead of inspection by faculty members, they would substitute a systematic checking of the location and job of all graduates each year, and for item four visitation on request from the field.

Methods for Insuring Continuity of Growth in Teaching Corps

Turning from the teacher-training institutions to the public-school system, response has come to the question, "What plan have you for training your teachers for improvement while they are in service?" The majority of superintendents reporting gave various teacher-rating devices among other methods used to insure continuity of growth in their teaching corps. This is to assume that teacher rating will result in teacher improvement. Is this correct? The obvious answer is that, after all, teacher nature is human nature, and the laws and conditions of learning are the same everywhere. There must first of all be a difficulty analysis to discover the learning curriculum. This is really the first checking of progress, and further checkings in terms of progressive standards motivate learning efforts toward an ultimate objective. If we have, then, tools for the measurement of teaching success refined to any reasonable degree of efficiency, they may well be used for the analysis of teaching difficulties and for the determination of progress on the road of learning toward the end goal of effort, activity as a master teacher.

Such a diversity of methods of teacher rating appeared in the returns that it was found to be desirable to classify them separately. Where it was found possible to do so, the rating schemes used in the larger systems were grouped as taking account (1) of teaching skill, (2) of personal characteristics, and (3) of professional improvement. Frequencies for these three groups were 24 per cent, 31 per cent, and 40 per cent, respectively.

In the smaller systems, the most frequent items of technic in teacher rating, those found in eight per cent and more of the systems, are as follows:

Item	Per Cent
1. Visitation by superior officer	45
2. Results; pupil progress	22
3. Personal conference	18
4. Standard achievement tests equated with intelligence	12
5. Standard tests	12
6. Courtis Detroit method	8

In the larger schools, the most frequent items, those found in six per cent and more of the systems, are as follows:

Item	Per Cent
1. Visitation of superintendent or other superior officer	66
2. Principal's judgment	60
3. Teacher's work in special subjects judged by special supervisors	47
4. Rating scheme for teaching skill	40
5. Rating scheme for personal characteristics	31
6. Rating scheme for professional improvement	24
7. Standard tests	16
8. Personal conference	14
9. Self-rating plan	6
10. Results; pupil progress	6

Certain contrasts are noticeable in these two groups of facts. Nearly 20 per cent of the smaller systems do not use any plan at all for teacher rating, and but 8 per cent of the larger systems make a similar report. Among the smaller systems using any plan at all, 20 items of technic in teacher rating are reported, while among the larger systems 16 items appear. However, among the 20 items in the former group, possibly 5 or 6 are found to be of little value. On the other hand, a number of superintendents are using the most modern methods of judgment in teacher rating, such as the Courtis Detroit plan, standard achievement tests equated with intelligence, and class diagnostic charts. Evidently, these young men have returned from college or university bringing with them something which they believe will bear trial in their own schools.

When the data from all systems reporting are thrown together, the four items of technic given in Table II are found to be common to all. Here it would seem that the smaller systems make a better showing, as the frequency is much greater in the third item, and the bad eminence of the first item is not so striking!

It is evident that the methods of measuring teaching skill used in these 100 public schools are of different value. What is their rank order, and does this correlate with their frequency? It would be unprofitable to attempt a minute ranking of each item of technic found among the systems. If we can successfully say which are better, and which not so good, it will be serviceable. The basis of judgment must be objectivity; that is, in the better methods, the devices used approximate more nearly the tools of measurment employed in the physical sciences. This tentative ranking is shown in Table II.

It is quite apparent that this order of value does not correspond with the practice in the one hundred systems examined. Only three or four of the six and ten most frequent items appear in the better list above. Traditional visitation seems still to be the favorite method of checking teaching skill in systems of all sizes. It will be noticed that the smaller schools apparently make the better showing, for outside of visitation and personal conference all other most frequent methods appear in the better list above.

It should give the thoughtful educator pause to find that, so far as this brief investigation goes, in one half of our school systems the technic of our essential activity, that of classroom teaching, is still a matter of subjective checking by administrators and other "superior" officers, many of whom have perhaps been out of touch with the details of classroom problems for years.

TABLE II

FOUR METHODS OF JUDGING THE SUCCESS OF TEACHERS IN SERVICE USED BY BOTH LARGER AND SMALLER CITY SCHOOL SYSTEMS (PER CENTS)

Combined Rank	Item	Frequency in Small Systems	Frequency in Large Systems
1	2	3	4
1	Visitation by superior officer	45	66
2	Personal conference	18	14
3.5a.	Results in terms of pupil progress	22	6
3.5b	Standard tests (raw scores)	12	16

A Two-Fold Ranking by the Faculty of a Teachers' College of the Fourteen Methods of Judging the Success of Teachers in Service Used by All Public-School Systems Reporting

I. Better Methods:
1. Standard achievement tests equated with intelligence.
2. Results; pupil progress, standard tests.
3. Courtis Detroit method.
4. Class diagnostic chart; methods used; examination of daily plan book; results; pupil progress; standard tests; supervision.
5. Rating scheme for teaching skill.
6. Rating scheme for professional improvement; "Teaching service memorandum" of professional improvement.
7. McMurry's subjective standards.

II. Poorer Methods:
1. Rating scheme for personal characteristics; Institute for Public Service plan; rating card.
2. Self-rating plan.
3. Personal conference.
4. Principal's judgment; teacher's work in special subjects judged by special supervisors; county superintendent's judgment.
5. Visitation by superior officer.
6. Adequate previous preparation of pupils checked by present teacher; superintendent's subject tests of pupils.
7. Interest aroused among pupils.

Experience in other realms of human activity should be suggestive here. Progress there in terms of refinement of method and improvement of product has invariably followed a definition of ultimate objectives and the devising and adoption of better tools for the measurement of proximate progress. Until we discover and analyze our real end goal in teaching and have made instruments which will reveal levels of teaching skill attained, we must not expect the best results from American education.

Other Methods for Securing Growth in Service

When the methods for securing the growth of teachers in service other than rating schemes were classified, those in six per cent and more of the smaller systems in communities of 5,000 population or less are found to be as follows:

Item	Per Cent
1. Personal conference	59
2. Reading educational literature	56
3. Visitation by superior officer	53
4. Regular general teachers' meetings	53
5. Group conferences on specific problems	44
6. Visiting other teachers	21
7. Demonstration teaching by other teachers, superintendent, or supervisors	14
8. Supervisory bulletins	14
9. Checking teaching methods	14
10. Assignment to special educational projects	14
11. Measurement of the results of teaching with remedial suggestions	14
12. Curriculum making	12
13. Enrollment in extension or correspondence courses	12
14. Attendance at teachers' associations	12
15. Additional salary for merit	8
16. Appeals to group emulation	6

It is interesting to note that over half of the superintendents reporting still believe that there is some magic connected with their visitation, personal conferences, and general teachers' meetings on Friday afternoons. But it is encouraging to find so very few using impassioned appeals to *esprit de corps*, and so many requiring reading of educational literature, calling of group conferences, stimulating teachers to visit and report, arranging for demonstration teaching and for programs of standard measurement, and leading in curriculum revision. In many of these small systems, real educational leadership is evidently adopting definite objectives and advancing along the path of improvement at a rate possible in the social situation obtaining.

The most frequent methods of securing the growth of teachers in service reported from seven per cent or more of the larger systems in cities of 5,000 population or more are as follows:

Item	Per Cent
1. Pension or retirement plan	90
2. Visitation by superior officer	62
3. Personal conference	62
4. Group conferences on specific problems	59
5. Supervision by general or special supervisors	56

(Concluded on Page 154)

The School Board and the Superintendent

Roy R. Roudebush and John Dale Russell

THE DUTIES OF THE BOARD

The source of all local school authority is the state. By the constitution of the state, our public-school system is a state system. The legislature has delegated some of its power to local authorities, but it should be clearly borne in mind that the local authorities have in themselves no inherent right to this power. It is delegated power, and any time that the legislature chooses it can withdraw from the local authorities a part or all of the powers that it has given them, just as it can also extend to them new powers.

As our city and town systems are now constituted, the local school authority is vested in the school board. In general, the duties of the school board may be classed as "legislative," that is, the board is concerned in the main with problems of policy, leaving the execution of these policies to its responsible executive.

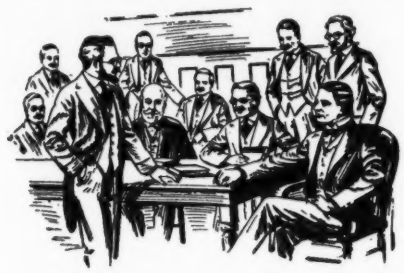
The first, and by far the most important duty of the school board is the selection of the superintendent of schools. This very responsible duty is one which the board cannot shift or delegate to somebody else. Since a wise selection is so all-important to the welfare of the schools of the city, a few suggestions are here given as to methods of procedure which a school board will find it advisable to follow when confronted by the problem of selecting a new superintendent.

In the first place, steps should be taken toward filling the position just as soon as it is known that there will be a vacancy. Circumstances occasionally arise in which it is necessary to fill a vacancy quickly; but in general this situation should be avoided if it is at all possible.

In the second place, there should be a considerable field of applicants from which to make the final selection. Inquiry should be made from universities and teachers' colleges which have made a reputation for training school superintendents. These institutions are always glad to recommend suitably qualified applicants from among those who have been their students, and, in general, the recommendation of such an institution should be considered a good indication of fitness for the position. These institutions must make their recommendations guardedly, else they cannot long continue to maintain their prestige in the educational world. In a similar manner, teachers' agencies dealing in the field of school administration may be appealed to, and applications from this source considered. Educational leaders in the state may be appealed to, such as the state superintendent, heads of departments or schools of education in the colleges and universities, and superintendents of the larger cities. In making such inquiry, it is well to state clearly the particular qualifications desired in the superintendent that is to be chosen, as well as the salary that can be offered.

Each applicant for the position of superintendent should be asked to file complete credentials with respect to his teaching and administrative licenses, his training, and his experience, together with a list of references from whom the board may make inquiry as to the fitness of the applicant for the position.

The references of every applicant who seems at all promising should be carefully investigated. No weight whatever should be given to letters of recommendation carried or presented personally by any applicant; but confidential statements should be sought directly from the person given as reference, without such a statement having gone through the hands of the applicant. It is only in this way that frank, unbiased opinions can be secured.



On the basis of a careful study of the credentials and recommendations of all the applicants, the school board should next eliminate from consideration all except the very few candidates which seem to be best qualified for the position. These few candidates should be interviewed personally and the final selection made by a unanimous decision of the board after weighing carefully all the evidence.

Emphasis should be given the point that the school board should select as superintendent somebody in whom they can repose full confidence. The situation in which the board has employed somebody in whom they do not have confidence leads to mutual distrust and a progressive program for the schools becomes an impossibility. The feeling of distrust soon comes to pervade the whole school system. Principals and teachers feel it, and do not give full loyalty to the superintendent. Even the pupils sense it and difficult disciplinary problems arise. The only way of avoiding the certain disorganization of the school system is for the board to repose full confidence in the superintendent whom they select.

Defining Scope and Function

After the superintendent has been selected, the school board should draw a definite contract with him, specifying exactly his duties, powers, tenure, and salary. Since the school board is a continuing body, such a contract may extend for a longer period of time than the tenure of the individual members of the board, and is binding upon the school board until the expiration of the contract, even though the personnel of such board is at that time entirely different from that of the board which made the original contract. (See Moon v. South Bend, 50 App. 251, 255; 98 N. E. 153; also Reubelt v. Noblesville, 106 Ind. 478.)

The whole matter of the selection of a well-qualified, concordant superintendent is so essential to the well-being of the schools that there is every justification for placing it in the first rank as the most important duty of the school board.

But there are other duties which confront the school board. A considerable number of these duties may be summed up under the general heading of "actions to be taken on the recommendation of the superintendent." This is a large general class of duties, concerned primarily with the professional aspect of the direction of the schools, in which the board should act only upon the recommendation of the superintendent. When such recommendations are presented to the board for action, a most careful study should be given them. The board is the representative of the general lay public, and should be prepared to present the layman's opinion on any proposal made by the superintendent. After giving the recommendation careful study, the action of the board should be either to approve, or to disapprove. No action should be taken by the board to modify the recommendation of the superintendent. However, if the board cannot approve the recommendation, the superintendent may wish to present it with the modifications suggested by the board, in which case again the action of the board will be either to approve or disapprove.

The inference should not be drawn that in actions taken only on the recommendation of the superintendent the school board becomes a mere "rubber stamp." Such is by no means the case. The point should be reemphasized that the board should act on the recommendations only after a most careful study of them. Always there is the right to disapprove, and disapproval of the recommendations of the superintendent does not necessarily involve any loss of confidence in the superintendent.

Particular care should be taken to avoid any element of personal feeling in a situation in which the board feels it necessary to disapprove the recommendations of the superintendent. The superintendent should not feel that he is personally being "turned down," but should look at the disapproval as a failure on his own part either to appreciate properly the layman's point of view, or to present properly the point of view from which the recommendation was made.

In any event, the final responsibility for the success or failure of the proposed recommendations rests with the board. If the board approves, they immediately become the board's recommendations, not the superintendent's, and the citizens of the community look to the board for explanation if the proposal proves unwise.

Initiative With Superintendent

The following duties are listed under this general heading of actions to be taken by the board only on the recommendation of the superintendent of schools.

1. *The employment and dismissal of the personnel of the school system.* No principal, teacher, attendance officer, janitor, clerk, or other employee should be given employment by the school board except on the recommendation of the superintendent of schools. This recommendation should be in writing and should be made a part of the permanent minutes of the board. As stated above in general terms, the board has the right to disapprove the recommendation for the appointment of any particular person; but it should not assume the initiative in suggesting what persons should be appointed. The superintendent alone is properly equipped and qualified to make the proper investigations regarding the suitability of those who are to be employed. Furthermore, the superintendent must work with the other employees and supervise their work. For any employee to feel that he has been hired directly by the board without the recommendation of the superintendent makes the employee feel that he is responsible to the board, not to the superintendent, for the proper performance of his duty. The board as a rule does not have the time or inclination to supervise such an employee personally, and the result is usually an inferior performance of the duty assigned to the individual. Experience clearly demonstrates that the employment of all the personnel of the school system should be only upon the recommendation of the superintendent.

2. *Fixing the salaries to be paid employees.* Exactly the same line of argument applies to this case as applied in the case of the original employment of personnel. The superintendent is in the best position to judge the worth of the services of the various individuals employed, and original salaries offered to new employees, as well as salary changes for old employees

Editor's Note: This manuscript was published last year in the form of a bulletin issued for limited local use by the Indiana State Education Department. At that time both Professors Roudebush and Russell were connected with the department. The subject is an old one, but the authors have dealt with it in the light of newer conceptions in the field of school administration. It is deserving of study by both school-board members and superintendents.

should be made only on the recommendation of the superintendent.

3. *The determination of major items of school policy.* Since the board must look to the superintendent for the professional direction of the schools, it follows that all items affecting major points of school policy should come to the board as a recommendation from the superintendent. A few of these items might be enumerated, as follows:

a. The fixing of the length of the school term.

b. The type of organization of the schools, involving such matters as the establishment of junior high schools, kindergartens, and other modifications of the traditional organization, the lines of responsibility which each employee bears throughout the system to other employees and to the board.

c. The adoption of curriculums and courses of study, together with the types of courses to be offered.

d. The determination of a teachers' salary schedule, setting the rates of remuneration for each newly employed teacher in accordance with training and experience and providing for annual increments beyond the beginning salary for teachers who remain in the system, such increments to be based upon success in teaching and furtherance of training.

e. The districting of attendance at the various school buildings, taking into consideration the capacity of the buildings and the travel distances necessary for the children.

f. The setting up of rules and regulations for the governing of the school system, including such matters as the regulations governing teacher absences, hours when teachers shall be on duty, times of salary payments, management of cafeteria, athletic contests, plays, and other extracurricular activities, the use of the buildings for other than school purposes, and a large number of similar rules and regulations that will be found necessary to the proper government of the school system.

4. *The expenditure of school funds for current operation of the school system.* Funds should be expended only on the recommendation of the superintendent. He should be held responsible for the technical investigation of the suitability of materials, supplies, etc., to the educational purposes of the school system, and he is in the best position to estimate the quantities of such supplies that will be needed. All supplies, wherever possible, should be bought on competitive bids, the specifications for the materials having been drawn up by the superintendent. Delivery dates should be fixed on the recommendation of the superintendent. It is common practice for the superintendent to be given complete authority for the purchase of such supplies as are not bought on competitive bids, the board in such cases approving the purchase as a matter of routine. This practice makes it imperative that the superintendent keep a careful check on the school budget in order to be certain that funds are available for the purchases which he makes.

These four duties have been mentioned which should be undertaken by the board only on recommendation of the superintendent: (1) the employment and dismissal of personnel; (2) the fixing of salaries; (3) the determination of major items of school policy; and (4) the expenditure of funds for the current operation of the school.

Where Superintendent's Advice Should Be Sought

There is another class of duties in which the school board should act, not so much on the recommendation of the superintendent, as with his advice. The distinction lies in the fact that the initial action in this class of duties is more clearly with the board, than it is in the class formerly discussed, wherein it was stated that the board should act on the recommendation of the superintendent. Also in this case, the board may modify the recommendation of the superintendent. The present class of duties may be described in general terms as having to do with the control of the school finances, and comprises several distinct duties.

1. The responsibility for the voting of the annual school budget is clearly with the school board. However, the consideration given the budget should be in the light of advice and supporting data which it is the responsibility of the superintendent to furnish. In most school systems the actual preparation of the tentative budget is made by the superintendent. The school board then considers this budget in the light of the known tax resources of the community, as well as the provisions needful for carrying out matters of school policy already decided upon. Care must be taken to provide for the necessary public hearing on the budget, as required by law.

2. In close connection with the voting of the annual budget for the schools, is the responsibility of fixing the tax levy and giving due notice thereof as required by law. If the citizens of the community appeal from the levy to the state board of tax commissioners, it is the duty of the board to support the school city in the appeal. The superintendent should assist the board in this appeal by furnishing the proper supporting data for the budget; but the primary responsibility for the support of the levy, in case of an appeal, is with the school board.

3. A third duty of the school board under the heading of financial control has to do with the development and control of an adequate building program for the school city. The school board, in its development of the building program, should seek the advice of the superintendent, particularly upon the strictly professional aspects of the building needs, and should also feel free to call in other consulting experts to deal with phases upon which the superintendent does not feel able to offer competent advice. Several specific duties may be listed under this general heading.

a. There should be a continuous study regarding the adequacy of the present plant carried on and reported to the board by the superintendent. The effect on building needs of the adoption of changes in school policy should be carefully studied and provision made in advance to meet such needs. Trends of school enrollments and population growths should be carefully studied, and an attempt made to forecast future building needs as accurately as possible, at the same time planning to meet the financial obligations that will be imposed on the community when new buildings are needed.

Sites and Buildings

b. Sites for school buildings should be chosen by the board, in the light of advice furnished by the superintendent. Sites should be chosen considerably in advance of immediate building needs, if possible, since by anticipation of the needs, the necessary land can usually be bought much more cheaply than when immediate action is necessary.

c. The decision to build a new building for school purposes rests with the board, always with the advice of the superintendent. In considering the plans for the new building, a list of the needed facilities, number of classrooms, number of special rooms, etc., should be furnished by the superintendent and carefully studied by the board. A competent architect should be employed after a careful investigation of his qualifications and experience in designing school buildings. When the plans are completed, the board should obtain competent educational advice and criticism on the plans, both from the superintendent, and, if possible, by some outside authority whom the superintendent recommends. However, the responsibility for the final approval of the plans, in the light of all the advice obtainable, rests with the board.

d. The further steps in the erection of the building are also the responsibility of the board. The board must receive the bids, let the contract, provide for careful supervision of the construction, and finally accept the completed structure. In all these stages, however, the board should seek the advice of the superintendent of schools.

e. A final responsibility, in connection with the development of the building program, which rests with the school board, is the provision for the necessary bond issue or other means of financing the projects undertaken. Here, again, the board may well profit by the superintendent's advice. The necessary support must be given to the bond proposal if it is appealed to the state board of tax commissioners.

The duties of the school board may be summed up by saying that the board bears the final responsibility for the conduct of the schools. In sharp contrast to the "rubber-stamp" idea of a school board, the real truth is that all the management of the schools, whether in matters upon which the board acts only on the recommendation of the superintendent, or in matters in which the board seeks only the advice of the superintendent, devolves as a final responsibility upon the school board.

This responsibility of the board is to three groups. First, there is the responsibility to the taxpayers of the corporation, to see that schools are so managed that the burden of taxation is not too great, and so that the fullest utilization is made of every dollar of tax money. Second, there is the responsibility to the patrons of the school and the school children themselves, to see that education of a fitting type is offered, and the children of the city given the fullest opportunity for their own development. Third, there is the responsibility to the state as a whole, to see that the education offered is in keeping with the ideals of citizenship which the public desires inculcated in the future citizens of the commonwealth. This responsibility is most definitely expressed in the relation to the state board of education and its agents to whom the state has given the responsibility for carrying out the constitutional provision of a uniform, publicly supported system of education.

In the eyes of these three groups, the taxpayers, the patrons, and the state, the school board is held fully responsible for the conduct of the schools of its community, and there is no way in which the board can avoid the final responsibility for the way in which its schools are managed.

The concluding installment of this paper, stating the duties of the superintendent and a classified summary of activities will appear in the next issue of the JOURNAL. —EDITOR.

SOME SCHOOL BOARD DON'TS

In an address before the convention of the Wisconsin Association of School Boards, held at Madison, Wis., Mr. E. H. Miles said that he had, as the result of a questionary addressed to 50 school-board members, superintendents, and inspectors prepared the following list of "don'ts" for board members:

"Don't think you are a school inspector.

"Don't commit yourself on any question of importance until the board as a whole has passed upon it.

"Don't play favorites.

"Don't shirk your duty in a trying position.

"Don't meddle.

"Don't forget to tell your superintendent to attend all board meetings.

"Don't give orders. Let the superintendent do that.

"Don't forget to tell your superintendent about some of the good things you see or hear about the school.

"Don't stay on the board unless you can work with the superintendent and the other members so that your school system serves well the boys and girls of your community."

Method of Determining Expenditures Required to Maintain the Status Quo of School Plants

T. C. Holy and H. H. Davis, St. Louis, Mo.

Since the purpose of expenditure for school buildings is to house the educational program, it follows that the amount of such expenditure is determined by the type and extent of the program to be housed and the ability and willingness of the community to house it well.

That the *type* of program is reflected in the building cost may be illustrated by the changed building requirements of a rural township which by process of consolidation has decided to substitute for its six or eight one-room rural schools with a "three-R" program, a centralized school with full twelve grades, domestic science, manual training, agriculture, and athletics. There has been no change in the number of pupils in the township but there is a decided increase in the building requirements.

The differences due to *extent* of program may be seen in the contrast of building plant and cost between a city with 20,000 children, and another city with a similar type of program but with 200,000 children to be educated.

The contrast in *ability* is exemplified by differences in plant between, for example, a wealthy suburban town and a mining or railroad town of similar size and educational program, whose spirit is equally strong but whose financial ability is weak. As for differences in *willingness*, just recall for a moment the county-seat towns of retired folk who take pride in traditions and bank balances but who let well enough alone in schools, and those other newer and less wealthy communities who vote for all sorts of bond issues and special-tax levies for schools. It may be parenthetically and less proudly stated that often it is not so much the housing of the educational program as a desire to care for athletic events that really carries the day for the bonds and extra tax.

If modern cities were in the habit of springing Minervalike into full stature, the school authorities would have only to decide upon the program to be offered, count the children to be educated, and determine the ability and willingness of the community before proceeding to estimate the cost of needed plant. Even our best boom cities do not show instant growth, however, and they all accumulate more or less adequate school plants as they develop. So in actual situations the school authorities have to consider a further factor of value and adequacy of the existing plant before estimating the cost of the future plant. Therefore, the first problem is to determine the annual expenditure necessary to offset depreciation on the present school plant. In school buildings, as elsewhere in life, some effort is necessary even to stand still.

In order to estimate the amount of expenditure needed to offset depreciation, it is necessary to know the present value of the plant and its depreciation rate. The "book value" of plants as usually carried does not serve in this problem because it not only does not allow for depreciation, but also fails to make allowance for changes in building costs. Thus, it happens that a building costing $200,000 built in 1910 is carried at the same figure as a building costing a like amount but built ten years later. This fails to tell the entire truth in one direction because the 1910 building has depreciated more than the 1920 building, and in the other direction, because $200,000 in 1910 built much more than $200,000 in 1920. To illustrate the amount of such change and to provide a basis for determining true present value, the following schedule compiled by Mr. L. P. Ayres of the Cleveland Trust Company and quoted by Mr. A. H. Bell in a speech before the National Association of Public-School Business Officials,[1] is included:

TABLE 1. INDEX NUMBERS OF CONSTRUCTION COSTS
1913 equals 100.00

Year	Cost Index	Year	Cost Index	Year	Cost Index
1890	69.2	1902	79.2	1914	97.6
1891	68.3	1903	81.7	1915	97.8
1892	66.4	1904	82.1	1916	108.1
1893	66.9	1905	85.6	1917	128.1
1894	64.4	1906	96.04	1918	143.2
1895	64.2	1907	96.8	1919	179.9
1896	64.2	1908	91.4	1920	247.1
1897	63.4	1909	91.7	1921	189.0
1898	65.3	1910	98.9	1922	179.0*
1899	73.1	1911	97.6	1923	201.0*
1900	75.1	1912	97.6	1924	201.0*
1901	76.3	1913	100.0		

*Estimated.

By consulting the above table it is clear that to build a building as good as the $200,000 1910 building was *when built* would cost in 1923 about $406,000, while a similar replacement of the 1920 building would cost only about $163,000.[2] Neither of these buildings was as good in 1923 as *when built* for depreciation has been going on, in the one case for 13 years, in the other for 3 years.

This matter of depreciation rate is a problem which has recently attracted much attention from schoolmen and seems to be in need of still more attention. That depreciation takes place in school buildings as well as in industrial buildings, no one doubts. That depreciation decrease in the plant investment is as truly a cost in education as in industry is also rather clear, but the methods of industry in determining *rate* of depreciation do not apply well in education. One reason for this lies in the fact that industrial structures are discarded for economic reasons, while school buildings are rather generally discarded for social reasons. In most cases, the general public is required through bond vote or otherwise to pass on whether or not a school building will be continued in use or replaced. In the public decision, such statements as "It was good enough for us, so it ought to be all right for our children," may turn votes to retain the structure. On the other hand, such slogans as "It was old when my father went to school there," or "Our children are entitled to as good schools as the children in Jonesville," tend to turn thumbs down on the old building. Here again there is a very large difference in the attitude of different communities. A building which one community decides to discard is often much better than one which another community will vote to continue in service. People who have been shown about the grounds of the venerable eastern universities and who have observed the guides, point proudly to the structures carrying a halo of tradition, are often surprised when visiting the campuses of our newer state universities by the way they are hurried past the old buildings and regaled with news and views of the latest structures.

[1]Proceedings of the Fourteenth Annual Meeting of the National Association of Public-School Business Officials, page 52. Kansas City, Missouri, May 18-22, 1925.

[2]To illustrate the error resulting from failures to adjust to changes in purchasing power, the expenditure per pupil in average daily attendance in a midwestern state in 1915 and 1920, both adjusted to the 1913 base is inserted here. In 1915, this entire state expended on the average $6.80 per pupil for capital outlay, while in 1920, the expenditure was increased to $9.97, a percentage increase of 46.6%. If, however, both of these figures are made comparable by adjusting to the 1913 base, the capital outlay per pupil becomes $6.94 in 1915 and $4.04 in 1920, a loss in construction purchasing power of 41.8% during the five-year period. In other words, what appears to be a net gain of 46.6% on the basis of actual outlay per pupil becomes a net loss of 41.8% when adjusted on the basis of construction purchasing power. In order, then, to have maintained a purchasing power in 1920 equivalent to the $6.80 expended in 1915, the people of this state should have expended $17.14 per pupil for capital outlay, an increase of 152% over the 1915 figure, and nearly twice as much as they actually did spend.

The initiative and impetus for building campaigns, however, usually come from the school officials of the community and a very encouraging trend in the nature and soundness of such initiation is found in the recent growth of research in building standards. The building score card has been perfected to a point where it provides a really objective basis for discarding buildings, and in the study of the experts' ratings of buildings is found a hopeful source of information as to depreciation rates. To illustrate how these ratings may be used, a study of the ages of 184 buildings recommended for immediate replacement by building surveys in ten cities (Philadelphia, St. Louis, Baltimore, Denver, Atlanta, St. Paul, Birmingham; Cedar Rapids and Marshalltown, Iowa, and Columbia, Missouri), was made, and shows the following ages:

TABLE 2. Tabulation of School Buildings on Basis of Age At Which Replacement Is Recommended in the Ten Cities Listed Above

Age in Years	Number	Age in Years	Number
15-19	7	50-54	46
20-24	8	55-59	25
25-29	6	60-64	9
30-34	15	65-69	3
35-39	16	70-74	13
40-44	14	75-79	3
45-49	18	80-84	1
Total number of buildings			184
Average age			47.6

It is interesting to note that the average age of the buildings which the educational experts making the surveys recommended for replacement was only 47.6 years. In the compilation of the data for Table 2, the records were not such that it could be definitely determined in every case the kind of material from which the building was constructed, i.e., wood, brick, or stone. The question, then, may be raised as to whether or not the majority of those buildings might not have been of wood construction and would, therefore, have a shorter lifetime. To answer this question, 15 buildings known to be of brick construction and classified as Types B and C according to grouping of the American Institute of Architects, were tabulated separately with the result that their average age was found to be 45.3 years or 2.3 years less than the average for the entire group. As a matter of fact, the longevity of the little red schoolhouse is in itself convincing evidence of the fact that, so far as gross structure is concerned, wood construction with periodic applications of paint will last from 50 to 75 years. The writers have in mind one rural school now sixty years of age which, unless a change of organization is effected, will continue for another generation or two.

A similar study of the ages of buildings actually replaced in a certain city during the past 20 years shows:

TABLE 3. Ages of Buildings Replaced in a Certain City

Age in Years	Number
20-24	1
25-29	1
30-34	2
35-39	5
40-44	5
45-49	1
50-54	2
55-60	2
Total	19 buildings
Average age	43.2 years

Here again the average age of buildings discarded is less than 50 years, and 31.8 years below the 75-year life used by the Educational Finance Inquiry.

It is probably true that the structural life of a school building could be much longer than its educational life, and that obsolescence is a larger factor in determining the replacement age of a building than is physical deterioration. From Table 3 it appears that depreciation probably should not at present be figured on a life

expectancy of more than 50 years for school buildings.

On the basis of 50-year life, buildings may properly be charged depreciation at the rate of 1/50 or 2 per cent of the original value yearly, which on the 1910 building mentioned would amount to 26 per cent by 1923, and on the 1920 building only 6 per cent. Thus, the 1910 building is subject to a 26 per cent reduction on the $406,000 figure previously developed, which leaves about $300,000 as the value in 1923 based on the cost of replacing it with a building as good as it *then was*. In a similar manner the $200,000 1920 building may be valued at about $153,000. Because of the variation in the useful life of school buildings even in a single city, this figure is not reliable for one building alone, but when applied to the entire school plant of a large district serves very well because the extra life length of some buildings is balanced by the short lives of others.

Knowing the date of erection and the cost price of each building, it is possible by the procedure outlined above to determine the present worth and the current depreciation rate on the school plant of any city. When this is done, the amount of outlay necessary to offset depreciation follows directly. To this basic amount must be added any costs incident to an improved type of program, cost of accommodations for additional enrollment, and costs due to any move toward a better housing of the program.

In order to demonstrate how this method works in practice, data concerning the elementary school plant and problems of a certain large city are here presented. In 1904, the cost of the school plant, adjusted to 1913 building-dollar values was $10,419,732, the current value of the plant after making allowance for depreciation was $7,172,212. The following table sets forth the yearly changes which took place during the years 1905-1925, inclusive. The values in all cases are adjusted to the 1913 building-dollar values by the schedule given previously.

TABLE 4. Yearly Changes in Value of Elementary School Plant of City A. 1905-1925

	Cost of Existing Plant	Value of Additions to Plant	Depreciation on Plant	True Value of Plant
1905	$11,527,543	$1,107,811	$230,550	$ 8,049,473
1906	12,172,320	879,177	243,446	8,685,204
1907	12,833,737	811,317	256,674	9,239,847
1908	13,146,265	440,428	262,925	9,417,350
1909	13,776,013	793,648	275,520	9,935,478
1910	14,481,008	788,295	289,620	10,434,153
1911	14,994,904	780,396	299,898	10,914,651
1912	15,507,296	512,392	310,145	11,116,898
1913	15,621,505	187,909	312,430	10,992,377
1914	15,923,257	301,752	318,465	10,975,664
1915	16,123,988	200,731	322,479	10,853,916
1916	16,237,087	113,099	324,741	10,642,274
1917	16,426,022	188,935	328,520	10,502,689
1918	16,433,564	81,742	328,671	10,255,760
1919	16,609,937	176,373	332,198	10,099,935
1920	16,924,999	315,062	338,499	10,076,498
1921	17,166,996	296,097	343,339	10,029,256
1922	17,441,073	274,077	348,821	9,954,512
1923	17,740,578	299,505	354,811	9,899,206
1924	17,801,411	60,833	356,028	9,604,011

The value of the plant will increase as long as the annual expenditure for additions exceeds the annual depreciation and will decrease when depreciation is in excess of outlays. From an inspection of the table, it may be seen that a rather rapid increase in the plant value went on from 1905-1912, and that a slow but steady decrease has occurred since 1912. The explanation for the decrease is found in the fact that very large expenditures during the low-cost period before the war, coupled with the slow increase in school enrollment of the city, made possible a wise period of light building activity through the high-cost period during and after the war. A further explanation is found in that during the last two or three years large outlays have been made for high schools to care for great increases in the secondary school enrollment.

From Table 4 it is evident that the cost, in terms of the 1913 building dollar, of annual depreciation is about $350,000. This provides the basis for answering the question as to the outlay necessary to maintain the status quo.

The next question deals with the cost of building needed to care for growth, and requires a figure on number-of-pupils-per-year growth, and one on per-pupil cost of buildings. The average annual growth in enrollment of elementary schools of the city in question has been about 1,000 per year over the past 25 years. A continuation of this growth may be assumed for the present to answer the question of numbers. On the basis of the present enrollment, the true worth of the plant is $116 per pupil—1913 values. Therefore, 116×1,000= $116,000 annual cost of providing building accommodations for the increased enrollment.

The sum of $350,000 plus $116,000 gives the cost of maintaining the present per pupil investment in educational plant. It must be remembered that this total of $466,000 is in terms of 1913 building costs and must be translated into the current cost for the year desired. This, of course, is done by multiplying by the current index of building costs. In 1923, for example, this was 201, so the actual amount of expenditure needed for that year was 201× $466,000, or $936,000. If the city in question spent less than that amount, it meant that it was not caring for the housing of its program so well at the end of the year as at the beginning. This, then, is the base figure so far as elementary schools are concerned. If improvements in the type of program, or better housing of the present program are desired, the costs must be added to the above base.

Summarizing, then, the procedure in determining the amount of expenditures for capital outlay necessary to maintain the status quo of the school plant in any school corporation is as follows:

1. Determine the approximate lifetime of the buildings. Based on present practice of replacement, 50 years seems to be the best figure for the Middle West, at least.
2. Take from the records the date of erection and the cost of each building.
3. By means of the Ayres schedule reduce these costs all to the 1913 base. By reducing all costs to a common base, simple computations are possible.
4. Apply the depreciation rate to the total adjusted cost of the plant, to determine the cost of annual depreciation.
5. Allow the annual depreciation rate on each building from the time erected to the present. The total depreciation subtracted from the total cost gives the present worth of the plant.
6. Divide the present worth of the plant by the number of children enrolled. The result is the amount of plant investment per child.
7. Estimate the annual future gain in enrollment for the period desired to be covered.
8. Multiply the estimated annual gain in enrollment by the per-pupil value of the present plant. This gives the cost of providing as good accommodations for the new pupils as are provided for the present enrollment.
9. Add the cost of offsetting depreciation (from 4) to the cost of caring for expansion (from 8). The total is the *adjusted* cost of maintaining the status quo.
10. Apply the present index figure for building costs to the total (in 9) to determine the outlay needed.

Correlation of City Superintendents' Authority with Training, Experience, Tenure, and Size of City

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During the school year of 1925-26 an investigation was made in order to determine the correlation between the extent of city school superintendents' professional freedom and: (a) the amount of their scholastic training; (b) their total experience, teaching and administrative; (c) the number of years such superintendents had held their positions; (d) the size of city in which they were employed.

The investigation was restricted to the most typical school system, that with elementary and high-school grades, in the four states of Kansas, Missouri, Nebraska, and Oklahoma. No private schools were included. Consolidated school systems were omitted in Kansas, Missouri, and Oklahoma. In Nebraska a few consolidated school systems were probably admitted, since the Nebraska directory[1] did not indicate consolidated schools.

School systems selected for the investigation were situated in small cities having populations of not less than 1,000 nor more than 15,000. For convenience the cities were grouped as follows:

City Group 1, Population[2]..... 1,000— 1,999
City Group 2, Population..... 2,000— 3,999
City Group 3, Population..... 4,000— 6,999
City Group 4, Population..... 7,000— 9,999
City Group 5, Population.....10,000—15,000

Superintendents in office during the school year of 1925-26 responded with utilizable information from 70 cities in Kansas, 66 cities in Missouri, 34 cities in Nebraska, and 30 cities in Oklahoma.

The total amount of training, both academic and professional, of the 200 school superintendents in the smaller cities of Kansas, Missouri, Nebraska, and Oklahoma, was found to be as follows:

8 superintendents (4%) had no baccalaureate degree;
21 superintendents (10.5%) had the bachelor's degree only;
56 superintendents (28%) had 1 to 15 semester hours' (inclusive) graduate work;
46 superintendents (23%) had 16 to 29 semester hours' (inclusive) graduate work;
69 superintendents (24.5%) had 30 or more semester hours' graduate work.

Medians of total training were found to be for:

200 Superintendents in the four states, 20.5 semester hours;
70 Superintendents in Kansas, 19 semester hours;
66 Superintendents in Missouri, 17.4 semester hours;
34 Superintendents in Nebraska, 30 or more hours;
30 Superintendents in Oklahoma, 15.5 semester hours.

Total training, expressed by per cents, of the 70 superintendents in Kansas was as follows:

7.1% had no baccalaureate degree;
10.0% had the bachelor's degree only;
28.6% had 1 to 15 semester hours' graduate work;
20.0% had 16 to 29 semester hours' graduate work;
34.3% had 30 or more semester hours' graduate work.

Total training, expressed by per cents, of the 66 superintendents in Missouri was as follows:

3.0% had no baccalaureate degree;
9.1% had the bachelor's degree only;
34.9% had 1 to 15 semester hours' graduate work;
30.3% had 16 to 29 semester hours' graduate work;
22.7% had 30 or more semester hours' graduate work.

Total training, expressed by per cents, of the 34 superintendents in Nebraska was as follows:

0.0% had no baccalaureate degree;
5.9% had the bachelor's degree only;
14.7% had 1 to 15 semester hours' graduate work;
17.6% had 16 to 29 semester hours' graduate work;
61.8% had 30 or more semester hours' graduate work.

Total training, expressed by per cents, of the 30 superintendents in Oklahoma was as follows:

3.3% had no baccalaureate degree;
20.0% had the bachelor's degree only;
26.7% had 1 to 15 semester hours' graduate work;
20.0% had 16 to 29 semester hours' graduate work;
30.0% had 30 or more semester hours' graduate work.

(Continued on Page 157)

[1] Nebraska Educational Directory, 1925-26.
[2] U. S. Census, 1920.

The Teacher as an Administrator

PART IV—THE TEACHER AS A PRESIDENT

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(Conclusion)

Except to a limited few who have had no connection with college or university life, it is not customary to think of presidents as teachers and, since this is a discussion of the teacher as a president rather than the other way around, perhaps there is no valid reason for emphasizing the point. But those who have been enrolled as university students, or who have been employed as instructors, have formed the habit of thinking of presidents only as executives and it is well for us to consider the backgrounds from which they have come. A large majority of them have been former professors or deans and, since it is difficult for one who has been a successful teacher to get completely away from the habits formed in working toward that success, they may be thought of still as teachers ever willing to guide and instruct those who exhibit the need of guidance and instruction. Not unlike the deans of the colleges, they are chosen from among members of the local faculties, from among the presidents or faculties of other institutions, or, in extreme cases, from among professional men having no active connection with university or college work, but who are needed to meet some dire condition that has arisen without warning.

The selection of certain men to act as presidents of higher institutions is frequently cause for marvel among those not entirely familiar with immediate needs. There is a tradition that presidents should be selected from among those who have gained past recognition for scholarly attainment, but the enormous growth of the higher institutions and the resultant need for administrators with a practical turn of mind has done much to break it down. The chief duty of the president at this time is to secure funds in order that the work of his institution may go forward equitably. One college president, in writing for one of the popular magazines, has termed himself a "scholarly beggar." His words of opprobrium are expressive without being intrinsically appropriate; as an imaginary type he may be both, but as a personality he is neither one nor the other, at least in the original meanings of the terms. Whatever scholarship he may have possessed has taken a pragmatic turn and he is restrained from becoming a common beggar by the dignity of his position and the high merits of his cause. Since funds must be secured through endowment or appropriation, he has been chosen for the task either because he is a convincing speaker and writer, or because he has a political pliancy and succeeds in gaining support where others less forceful in these traits would fail.

Dealing with Faculty and Regents

Again, he may have been chosen because of the facility with which he is able to handle and distribute funds already secured; or, because he is the type of individual who would best represent the board of regents to its advantage; or, because he has the power of smoothing over difficulties within the organization; or, because he has qualities that would attract a larger number of students; or, because he is the only person upon whom the board can come to unanimous agreement; or, in extreme instances where the other qualities are not so important, because of his reputation as a scholar; or, finally, because he seems to have all of these powers, with the further ability to secure funds when needed.

Immediate needs, however, are likely to disappear and others rise to take their places. The president chosen because he knows how to gain financial support may find himself confronted with the problem of gaining the moral support of his faculty. Or, he who was selected on his record of scholarly attainment alone may be so far out of touch with student life that he fails to meet the crises that arise and continue to arise throughout each student generation. His experience will be not unlike that of a president of the United States, and the tenure of the typical college or university president, although elected to office for life, is about the same.

The board of regents must be served and satisfied. The ever-growing faculty must be served and frequently appeased. The large student body, although little concerned with the fortunes of the institution's president, must be made to feel that the fortunes of the institution itself are in good hands.

Of course, no board of regents wants a weak and vacillating president in the position of executive head of the university or college. As a usual thing it will try to determine upon a man whose experience and training have fitted him for all kinds of duties, "both public and private in time of peace or war." And it is gratifying to the teaching profession to know that there has developed a tendency to select as presidents men who have devoted their lives to teaching, and who have been known at some time in their careers as highly successful classroom instructors. For, although his duties are far removed from the activities of the classroom, the president must spend much of his time in teaching and guiding, in counseling and disciplining, and in training his faculty to do the things he cannot do. He will be especially well fitted for this task if he has come up from less responsible to highly responsible positions and this is witnessed in the success of those presidents who have arrived at their stations through gradual growth and promotion. From teacher in rural school to principal of town school, to superintendent of city school, to dean of a college, to president of a university, is the history written into the lives of many men who now hold these high positions. There is one university that claims a total of forty graduates who are now presidents of higher institutions, and these, at some time or other, have nearly all been teachers or officers in the lower schools.

The Support of the Regents

It is safe to say that no man should undertake the responsibilities of a presidency unless he has the unanimous endorsement of his board of regents. The single member who refused to approve him in the election may be powerful enough to undermine all of his policies. Yet, with unanimous initial support, the problem is not settled. However small the board, no two of its members are likely to agree at all times. They, like all other groups in any manner connected with educational activities, are drawn from all walks in life, and each is probably intensely interested in representing his particular constituency. From the farms, from banks, from business, from the professions, from labor, from alumni, and from federations of clubs they come to propose the policies to be followed in administering the work of the higher institution. To take these policies and subtract from them these proposals that have least value and to unite them all into one general administrative program, without losing the support of a single member, is the task of the president if he is to be successful. Like the school superintendent, he must stand squarely on both feet, disagree if necessary, but without offense, ally himself with no clique, combination, or bloc, and play the game fairly, courteously, diplomatically, and honestly. He will not fail to remember that from each regent he will be able to add to his sum of knowledge and that it will not always be necessary for him to take issue even in disagreement, for the member who seems to be in error may be corrected by others among his peers.

It is highly essential that the president keep at least a majority of his deans in agreement on his policies. It is better, of course, if he is able to gain their support without exception but, due to the fact that because he previously had been one of them, or to the fact that certain of them were appointed to their positions before he was elected to the presidency, he can hardly expect that all will agree with him at all times. Those who may usually be counted upon to be on his side are those whom he has appointed and he may find it necessary to cultivate the others. There are few deans, however, who will not put forth effort to be of assistance to the president if approached properly, and the chronic trouble-makers may sooner or later find themselves dispossessed. The latter usually spend more time in hunting trouble than they do at the duties of the deanship and thus spell their own ultimate defeat. Through regular and called meetings and through personal conferences, the president will come in contact with all his deans, and he will find it profitable to not only listen attentively to their suggestions, but to put the suggestions into operation whenever feasible; for the deans are, like the board of regents, bearers of information that the wise president can utilize.

Contacts with Faculty

If universities were administered like the army, presidents would need to concern themselves little with the problems of individual faculty members. The deans would look after them and no instructor could go to the president, except as he gained the dean's permission to do so. But there is not only a certain democratic freedom about university life (some critics to the contrary) that permits contact between teaching members and president, but, due to the fact that the president employs all faculty members with or without the suggestion of deans and with the approval of the board of regents, the latter may feel free to take emergency problems to the chief executive without the consent of immediate superiors. This makes an awkward situation and one that might well be corrected, but so long as it exists the president must find time to devote to conferences with individual teachers and to general faculty meetings. It can be said with all fairness to both that the typical college instructor is so far out of touch with the problems of the president that he contributes little or nothing to the cause of administration. One president is credited with the statement that he could make a great university if he could "fire" half his faculty. Perhaps he was justified in his

stand; perhaps not. In any event, a system of promotion and remuneration that occasions some encouragement to the staff at large will do more to bolster up the work of instructors than all of the anathema hurled at their heads. If they do not react to it, the president may be supported in getting rid of them. But no extreme action is expected until it is ascertained whether or not the deans are contentedly at work and whether or not they are passing on an equitable amount of their contentment to their staff members.

Student-Body Relations

As intimated above, there are few close contacts with members of the student body either as individuals or in groups. Both the size of the modern higher institution and the existence of student government are responsible for this. The officers of the student-government organization find it necessary to ask for occasional conferences with the president, and some executives make it a practice of throwing open their offices for individual conferences with students for one hour, a half day, or one day each week. At times disciplinary problems are disposed of or the student may bring his complaints. Other than this the president is little known to the student body except as he addresses the entire membership at open convocation or as he is seen in his usual seat at the important football games. This is an unfortunate condition, for the student would profit much if he could know the ambitions and ideals of those who steer the university or college craft o'er troubled seas, and many of the intemperate actions of the weakest ten per cent would be eradicated.

No single-track mind is capable of pointing the way in the broad problems of university or college administration. The president of a university must not only know the relative importance of each of his colleges, in light of the service they render to the state or section served, but he must help to plan the contribution of each that it may not be limited to its comparatively narrow field of service but will be representative of the big contribution to be made by the higher institution as a whole. The university that is known only because of one or two outstanding colleges may prosper for a time but, to the extent that it is weak in others, it comes to be less deserving of the name. To build the entire university on a solid foundation takes breadth of vision, and the president selected from a single college may have to remind himself of this fact many times.

The Over-View

From this point of vantage in the offices of administration, the president should be able to see the entire university in action, much as a coach watches the development of his team; and it would be highly advantageous to him if he could get high enough to see his entire territory in panorama, in order that he might discern if not descry the various types of agencies from which financial support is derived and the various types of homes from which his students come. To learn these things, however, he must make personal visits to the representative communities served by his institution, and one of his important tasks is to orient each of these so that the sunlight of comprehension will bring each into proper perspective. Rural, village, town, and city communities are all parts of his bailiwick, and the president, in his eagerness to serve, must not lean too heavily toward any one of these.

The variety of duties expected of a president will depend upon the amount of official and clerical help allowed. He usually is provided with such assistants as a private secretary, an executive secretary, a treasurer or comptroller, a recorder or registrar, a dean of the faculties, a dean of men and a dean of women who represent him with the students, a superintendent of buildings and grounds, and the heads of such independent departments as the extension division, vocational bureau, and organizations of similar importance. For the work of each of these he is held responsible before the board of regents. Consequently, his days are full of work if not of grief, and only the most courageous is able to stand up under it. His office duties are multitudinous, but he must get away from them long enough to lecture here and there, take his place in fraternal, education, and honorary societies, travel far and near in search of funds with which to carry on, and entertain all the celebrities, to say nothing of hundreds of lesser lights, who come to his institution for a day or an hour.

The beautiful sentiment expressed in the adage, "they also serve who only stand and wait," was not meant as a tribute to university or college presidents. Their lives are consumed with active service from which there is no escape and their work is rewarded, if they see fit to accept, by appointment or election to the nation's most important and most highly coveted positions. Yet, whether they go into these or remain as heads of higher institutions, they are, more than they themselves probably realize, leaders of men and molders of thought. He who begins his remarks with the statement, "A university president once said * * *," is always sure of an attentive audience. This is simple proof of the high esteem in which they, as educational leaders, are held.

Each Type Equally Important

Thus it will be seen that none of these four chief types of school administration is less important than any of the other three. The amount of work and responsibility involved is not a matter of degree, but a matter of character. Not long ago a dean quoted to me a conversation he had had with a school superintendent. The latter had intimated that his work was particularly laborious, that he wished he might change positions with the dean. "I told him," said the dean, "that he should visit my office on one of the really busy days. It would show him what real labor is. I wish that all I am expected to do were to go about visiting schools and passing judgment on them."

Both were in error in judging the work of the other. No man can get a worthy conception of the detail involved in any administrative position until he has undertaken to fill such a position. Likewise no man can get a clear idea as to whether he would be able to perform the duties of administration until he has been asked to perform them. More and more administrators are realizing this fact and are training under-studies, and more and more we may expect that not only will potential administrators be trained in the arts of administration, but the great body of teaching personnel be instructed in the duties, powers, and prerogatives of their immediate superiors. Added to this the proper dissemination among members of boards of education of information concerning the exacting duties of the offices they are called upon to fill, we shall come nearer and nearer to the point where we shall understand each other perfectly. Thus those selected for administrative positions will have been chosen on the basis of merit, training, and a ready comprehension of the work involved. And a still greater compensation will have accrued—those who remain as the administrator's professional subordinates will understand why certain directions and orders are issued and will carry them out with the entire good of the system, division, or organization in mind.

Bridging the Commencement Gap

Crawford Greene, Principal, MacQueen High School, El Dorado, Ark.

With the extreme formality that comes with commencement and its attendant exercises, there seems to be an open gap between the informality of the schoolroom and the dignity of the graduating exercises.

Usually there come the final examinations with their attendant strain, a day or two of extreme nervousness on the part of the pupil as reports are being prepared and then the formal exercises, after which the class disbands forever.

Friends of the graduates who come from out of town for the exercises are usually too late to see the school in action and get no opportunity to meet the members of the class.

To bridge this apparent gap, to present a vivid cross section of the school and to exemplify the spirit of the school, there has been tried for several years in El Dorado a plan which has worked out with unusual success.

At a certain hour on the afternoon preceding the closing exercises the student body, faculty, and visitors are invited to assemble in the auditorium. The assembly is presided over by the principal, whose purpose it is to furnish the motive power for the occasion and to supply an atmosphere of naturalness. Each faculty member makes a short talk, the themes of which usually include appreciation of the pupil's work during the year, wishes for success of the graduates, happiness in the formation of friendships and wishes for a pleasant summer for all.

Following the faculty each senior is given an opportunity to make a farewell speech. All respond, as it is a tradition of the school that a pupil never fails to respond in assembly if called upon. The seniors tell of their accomplishments, their hopes and plans for the future, their love and loyalty for the school, their friendship for the faculty, their gladness in having done their work well and the sadness with which they bid the school farewell and go out into the world in their separate ways.

Underclassmen are then given an opportunity to speak and many take advantage of the opportunity. Visitors and former students are then invited to speak to the assembly. Usually the commencement speaker is present and responds with a short talk.

Often gifts for class sponsors or teachers are presented at this meeting. The football captain for the fall is usually a greatly applauded speaker.

The assembly is closed by class and school yells, followed by the school song sung with a zest that is characteristic of the biggest football game.

All too soon, so it seems, does the meeting terminate, the pupils rushing here and there for individual farewells, or soberly contemplating the fact that they are to leave their school and friends which have been so dear to them for four years, which now seem all too short. The visitors depart, impressed by the spirit of the school and wishing that they could relive their own school days again.

A leading educator of the state sat enthralled through the program last year, remarking at the close, "That was the most remarkable thing I ever saw in a school. I did not dream there was such loyalty and love for your school in your student body."

The proponents of the plan feel that it serves to bridge the gap of commencement time and that it satisfies the longing to say "goodbye" at this rather sad time of the school year. It is not a difficult undertaking. It requires no planning, the success resting upon the spontaneity of the pupils and the ability of the presiding officer to keep things moving.

(Concluded on Page 162)

Selling Your School to the Town

Russell S. Peterson

Back in our pin-feather days of youthful ignorance and innocence, I suppose that most of us used to believe that, if a school were a good school, the public would *per se* know of its excellence. We had a feeling that the school head had better devote all his efforts to the upbuilding of his school and leave to delighted patrons the telling of the merits thereof. The years have brought disillusionment, however, and with disillusionment the conviction that the good school cannot afford to hide its light under a bushel or any other dimming device. The school is in too much need of the financial support of the taxpayer and the moral support of the parent to trust to good works and good luck for its reputation.

The superintendent and the school board must see to it that the work of the school is placed before the public in such a way that it will be known and appreciated. Both the spirit and the service of the school have to be made manifest to the man in the street. The ideas and ideals of the school organization must be interpreted to school patrons so that they will be understood and a favorable atmosphere created. It is a definite part of the schoolhead's job to make sure that the truth regarding his school is so presented as to bring about understanding, create good will, and secure an active and continuous cooperation on the part of his public.

Building a Reputation for the School

The purpose of this article is to outline briefly a few of the ways in which the head of a small-town school system can go about the building up and maintenance of a good reputation for his school.

Before steps be taken toward the building up of a good reputation, it is essential that the superintendent make sure that his school is deserving of a good reputation. No amount of publicity and advertising can make a community enthusiastic about, or even satisfied, with a poor school system for any length of time. Before you set about telling good things be sure that there are good things to tell. Take inventory. What do you find? You cannot expect outsiders to be satisfied with your school if you are not. Are you doing things of which you yourself are proud? What could you be doing better? Are there weaknesses, potential or actual grounds for unfavorable criticism, that can be removed? The quality of the performance of your school must come somewhere near approaching the quality of your ideals. Before you try to sell your school to the rest of the town, be sure that you yourself are sold on it.

Manifestly, however, neither the development of a good school system nor the establishment of public confidence and pride in that school system can result from the single-handed efforts of the superintendent no matter how strong he may be. For both, the loyal cooperation of the entire teaching force is necessary.

The teachers, if they are home girls, generally come from families of intelligence and influence. If they are from out of town, they often room and are practically made one of the family in some of the best homes in town. In either case, they mingle socially with those people whose support is most vital to the school. If the policies of the administration are believed in by the teachers and upheld by them in their conversations with the members of their own families and other citizens, they can exert a tremendous influence toward the building up of the right kind of school spirit in the community. A considerable part of the battle for public support has been won when the superintendent has gained the confidence of his teachers.

How can the superintendent win the confidence and loyalty of his coworkers? Not by the pseudogeniality of the ward politician and not by truckling to every passing whim of his teachers. Most of us have seen men try that sort of thing and gain only the contempt of those whose good will they attempted to win.

The affection and respect of teachers for their superintendent cannot be bought by coin as base as that. A smiling face will little avail the superintendent who has shown to his teachers that he lacks the courage of his convictions, whose administration is not steered by a definite policy, or who does not have the best interests of his school system at heart. At the same time the superintendent can do far worse things than cultivating a warmth of personality that makes every teacher in his corps feel that her success in both teaching and the fullness of life after school hours is of genuine concern to him.

In every community we find people whose attitude toward the teachers may be summed up in the phrase, "Treat 'em rough." Themselves, generally people of little intelligence, initiative, or imagination, they delight in seeing the exercise of these qualities by teachers curbed as fully as possible. Their conception of a strong school head is one who limits the activities of his teachers with an unlimited number of petty restrictions. There are few superintendents and few school-board members who have not at some time or the other had people of this type urge them to harass their teachers with vexatious and unnecessary rules.

Interpreting the School to the Community

A weak superintendent may find it expedient to court a transient popularity with this element by yielding to its wishes. Or, perhaps he finds it necessary to conceal his lack of efficiency with red tape, and his dearth of inspiration for his teachers with a superfluity of harsh prescription. The strong superintendent, however, can accomplish ever so much more by seeking the happiness of his teachers than he can by making them uncomfortable. Some rules and restrictions will always be needed, but he will see to it that the teachers recognize their fairness and necessity. Teachers who are treated not as professional coworkers, but as children or as "wops," cannot be expected to spread the good word about their school and the policies of their school head.

The school head who forbids teachers the use of the school telephone, even after school and during the noon intermission, even though he himself is continually using it for his own private business, can hardly expect his teachers to boost the administration. Neither will the teachers boost the administration of a superintendent who reprimands his teachers for even a minute's tardiness, but always impugns the clock's veracity on mornings that he himself is late. He who would enlist the help of his teachers in selling his school to Main Street must make some attempt to apply the Golden Rule in his relations with them.

While the teacher is important in the job of interpreting the school to the community, the pupil is even more important. In its pupils, the school has at its disposal one of the most effective, perhaps the most effective, publicity channels in the community. Almost every mail brings to the schoolmaster's desk letters from national organizations which seek to enlist his aid in their campaigns of publicity and propaganda. The publicity directors of groups ranging from meat packers, to associations for the prevention of cruelty to aged guinea pigs, seem to know the importance of the school as a means of influencing public opinion. Isn't it about time that we school people realized that in our pupils we possess a potentially powerful force for setting the school in its right light to its clientele?

The school can have no better advertisement than pupils going home happy because they feel that at school they have accomplished something which they felt was worth while. It is rare indeed to find a parent who speaks ill of the school or teacher about whom his child is enthusiastic. Said a parent: "I have never met my little girl's primary teacher, but I have a decided conviction that she is a good teacher because my daughter loves her and has learned a great deal in the four months she has been in her care." On the other hand, we have all seen parents become antagonistic toward a school or a teacher because their child disliked the teacher. We cannot, of course, make a teacher's popularity the criterion of her teaching ability, but a school whose teachers are not able to win the liking of their pupils if not their love, is going to have a hard time keeping the support of its patrons.

School pupils, even the little ones, are people. They like to be noticed, to feel that they count even as you and I do. When Bobby's superintendent is able to call him by name and ask him how that pet rabbit is getting along, he has gone a long way toward winning Bobby's support and loyalty and with it the support of Bobby's father, Bobby's mother, and perhaps even that of grandpa and grandma. Other things being equal, the superintendent or principal who knows his pupils as individual boys and girls and is able to make them feel that they are his friends is going to have more public support for his policies than is the man who treats them all in the mass.

It is important, too, that the opportunity to participate in school activities be passed around to everybody instead of being reserved for a favored few star performers. A number by the school orchestra at the commencement exercises is a good deal better from the standpoint of popular appeal than is a piano solo. If two school plays are given in the course of the year, it is better to have thirty people each participate once than to have fifteen people take part twice. Just because a boy appears to be the most

capable of his group, do not let him have all the positions of responsibility and honor in school. Give the rest of them a chance. Perhaps some of the others will do just as well as the one whom we have picked as the ablest. What if they don't do as well? They need the experience all the more, and instead of having one family interested in school activities we have perhaps nine or ten.

If we would have our pupils spread a good report of the school, we must cultivate in them pride in their school and its achievements. We cannot spend too much time and energy in acquainting our pupils with the objectives of the school and the success with which those objectives are attained. If we are doing a better job in English than we did last year, we must let our pupils know about it and help them to rejoice in their share in the achievement. We must make them feel that our school is their school. Then they will feel that pride which we all enjoy in the progress of that which we identify as our own.

One school with which I am acquainted has found the circulation of what they call the School Improvement Bulletin an effective means of arousing the right kind of school spirit and informing pupils of the worth-while things the school is doing. This bulletin is a little mimeographed, one-page sheet issued monthly with a student editorial board and a faculty adviser.

Whenever a student, a class, or a school organization does something markedly better than last month or last year, the bulletin broadcasts the news to the pupils of the school and through them to the homes of the community. One month's edition may tell of the attractive appearance of Room 12, the perfect attendance record of Room 3, and the improvement in the scores of this year's standardized history test over last year's.

Another issue points with pride to the excellent order that is evident in the halls and corridors before school and at dismissal time, names ten seventh-grade pupils who have been awarded diplomas for their proficiency in writing, and boasts of the fact that the state athletic association has awarded a silver loving cup to the athletic teams of the school for the high quality of their sportsmanship.

In addition to its teachers and pupils, the good school has in its physical plant an effective means of advertising its excellence to the public. Most of us have an instinctive feeling that that which looks attractive is of good quality. I go to the good-looking store in preference to the one whose appearance is against it although the quality of the goods which the latter sells may be just as high. I buy the can of peas with the attractive label rather than the one whose label is torn or dirty, although I know that damage to the label cannot possibly affect the quality of the peas inside the can. Likewise the citizen who daily passes a school with well-kept grounds, shining windows, and everything in good repair is receiving a daily suggestion that all is well with the school system.

Nor does it suffice to confine the beautifying to the exterior. In these days when the school plant is often in nightly use by adult community organizations, the school head who would have the public think well of his school must pay careful attention to his housekeeping. Dirty floors, messy blackboards, and cupboards and desks littered with broken pieces of equipment make mighty poor labels for educational goods.

The Newspaper as a Publicity Aid

The local newspaper can be a valuable ally. Most editors are glad to give the schools a column, a corner, or even a page of their own every week. The editor knows that few parts of the paper are read with more interest in homes that are represented by children in school, and that means most homes. Sometimes the school columns are written by regular members of the newspaper staff, sometimes by members of the school faculty, and very often by school pupils. In any case, it deserves the careful supervision of the superintendent.

A school column that gives a fair and interesting picture of the activities of the school can be of immense help in educating the public and arousing the right kind of school spirit in the community. On the other hand, if school-newspaper space runs largely to jokes and accounts of humorous and near-humorous incidents and accidents in the classroom, real injury is done to the reputation of the school. People reading week in and week out, nothing about school but accounts of frivolous happenings there, cannot be blamed if they form the conclusion that most of the school time is consumed in idle trifling.

Last, but far from least, the public must be kept as fully informed as possible regarding school-board proceedings. School boards that avoid publicity generally receive the most undesirable kind of publicity. When the community is told nothing, it too often imagines the worst. Once in a great while something happens that the good of the schools requires to be kept as quiet as possible it is true. As a general policy, however, the sensible thing is to let the public know the facts and problems that confront the board. We all know that even the severe critic of the school-board policies, if he is once elected to the board, generally works in harmony with the other members. He criticized before because he did not know. Given a good school board and a good superintendent, a public that knows the situation will offer its staunch support.

School Acoustics

Geo. P. Little, Acoustical Engineer, Cleveland, Ohio

Commenting on the successful results of an installation of acoustical treatment in the auditorium-gymnasium of the Oak Ridge School of Royal Oak, Michigan, Superintendent Charles R. Starring wrote to the contractor: "* * * We are glad to recommend it as a cure for poor audition, *particularly, as a part of the original equipment.*" It is the purpose of this article to suggest the lines of thought followed by an acoustical engineer in studying the plans of a new school building.

Most common among acoustical difficulties experienced in school buildings is that known technically as *excessive reverberation.* This means an undue prolongation of all sounds after their source has ceased. When a sound is produced in any confined space, it travels equally in all directions at the uniform speed of approximately eleven hundred feet per second. When the sound waves come in contact with the walls of the room, some of the energy is absorbed and transmitted, and the majority is reflected back into the room. It so happens that most modern building materials are almost perfect sound reflectors, so that only in the neighborhood of two per cent of the energy of the sound wave is absorbed at each contact with the walls. Consequently, an interval of several seconds must elapse after each sound, before sufficient of its energy has been absorbed to make it inaudible, and this period of reverberation can be measured in any interior from the plans and a knowledge of the materials to be used.

Experience has shown within what limits the reverberation will permit satisfactory acoustics in rooms of different sizes and natures. For example, a reverberation of 1.5 seconds, under average audience conditions in a classroom, would be entirely satisfactory, whereas a reverberation of three seconds would produce what are generally termed "disagreeably noisy conditions."

It will be readily seen that the reverberation in any room can be easily reduced to acceptable limits by increasing the sound-absorbing power of the walls to a satisfactory point. For this purpose, especially devised acoustical, or sound-absorbing materials are available. With the coefficient of sound absorption for each material established by authoritative measurements, it is a simple matter to calculate what area of the walls or ceiling needs to be finished in the acoustic material to reduce the reverberation to an acceptable amount.

The clothing of an audience is an extremely important factor in the problem, as this is an excellent sound absorber. It is customary to figure the ideal or optimum period of reverberation for the room under consideration under what would be average audience conditions, and adjust the reverberation accordingly.

Many different materials are available for the correction of excessive reverberation, and their merits and shortcomings from a practical standpoint should all be carefully weighed before making a selection. The ease or difficulty of keeping the material clean should be investigated. The ease and expense of making repairs is another important factor. Must the material be installed by trained mechanics from a perhaps distant headquarters, or can repairs be made by local labor? The effect of painting, on the sound-absorbing qualities, should be looked into, particularly in the case of improper paints applied during later years by uninformed mechanics who may be redecorating the room. In this field, as in others, first cost is not always the best indication of ultimate value.

Besides auditoriums, acoustical treatment is widely used in schools, in swimming pools, gymnasiums, cafeterias, kindergartens, and classrooms, shops, typewriting rooms and libraries, and as the advantages of quiet working conditions become more fully appreciated, undoubtedly acoustical treatment will be demanded for school corridors.

Not a great deal can be done in the way of improving acoustical conditions by changing standard designs and shapes for these rooms with the possible exception of auditoriums. From the acoustical standpoint, balconies are advantageous, particularly in the rear of an auditorium. The opening under the balcony should be made large, and the ceiling under the balcony kept flat with the main floor converging toward the balcony ceiling at the rear of the auditorium. This megaphone effect will tend to compress the sound energy entering into the balcony opening and improve the hearing conditions in the rear seats. Sound is a fluid energy and seeks to fill whatever spaces it enters, and naturally by compressing the sound energy at distant points, the hearing conditions will be improved, providing always, that the "left-over sound," product of excessive reverberation, is properly absorbed by suitable acoustic materials.

In the case of many acoustical materials, considerable economy may be effected by planning on their use when the specifications are prepared for the building, and every school board, planning new buildings, owes it to itself to secure an acoustical analysis and report based on the building plans from some competent acoustical engineer.

Fundamental Elements in the Training of School Janitors

F. E. Henzlik, Professor of School Administration, University of Nebraska

Until recently, the training of school janitors for their tasks has been overlooked. The remarkable efforts for many years, on the part of school administrators and boards of control, to supply the means and the funds for the improvement of teachers and for the construction of new buildings, have so absorbed our attention, that we have overlooked the problems which relate to the services rendered in properly heating, lighting, ventilating, and cleaning school buildings. In fact, only 51 out of 1,088 cities reporting in 1923, attempted in any way to give instruction to school janitors. We have lost sight of the fact that it is an essential part of education to give attention to the solution of the problems of operation and good housekeeping in our schools. Dr. C. E. Reeves, in his significant study of janitor service in elementary schools, points to the same tendency when he says: "The first thought of head administrators, has been to secure respectable and up-to-date buildings in which excellent work can be accomplished, but when such are secured, their second thought surely ought to be for the care of the buildings."

In a country where we have over three billion dollars invested in school property, and where we are annually investing over a hundred million dollars in school buildings, the training and testing of the caretakers of this property is as logical and imperative as the training of teachers, nurses, and librarians. Even after we analyze in great detail the importance of the tasks and duties of school janitors, and set up proper standards which should prevail in the care and operation of school plants, as Dr. Reeves and others are doing, we shall still have inefficient housekeeping in our schools, because of the type of employees now in service. It would be manifestly unfair, however, to shift all the blame on the persons who have entered the janitorial field, when the fault is fundamentally that of the administrators. Our school systems have been run at a low efficiency and in many places with great incompetency, because we have neglected to give proper training to those who serve us in this capacity. We have been so interested in other matters that we have not realized the importance of janitorial service. We have not given the employees the consideration due them; as a result, scant facilities have been provided for their training in the specialized work they are called on to perform.

Importance of the Janitor

But, with the many changes which have taken place in the past five years, in national, state, and local laws affecting our schools, there has come a realization that the caretakers to whom our school buildings are entrusted, must not only be able to scrub, sweep, clean, and shovel coal, but must also know certain fundamental facts about hygiene, the principles of ventilation, heating, humidity, sanitation, and methods of cleaning.

The experiments of Benedict, Milner, Leonard, Lambert, Frost, Hill, Flugg, Thorndike, and others, have brought us to the realization that the really important factors making for health or disease in the atmosphere, are physical rather than chemical or biological. From these experiments we find that heat, and heat combined with excessive moisture, is the condition in the air that has proved to be the greatest cause of discomfort, inefficiency, and disease. Yet, overheating and excessive humidity are the commonest of all conditions in our schoolrooms today. The physical development of the child depends on the environmental conditions. The janitor, therefore, is an important factor in controlling the comfort and health of the occupants of our school buildings. Dr. Dresslar says: "The janitor, next to the principal, is perhaps the most important officer in the school." Terman expresses the same idea: "The position of the janitor is a very responsible one. No other individual, unless it be the principal, has so much influence over the conditions which affect the health of the pupils." Another eminent school authority says: "A good janitor is harder to replace than a good teacher." He is to the school, what the housekeeper is to the home. "Euthenics is the handmaid of eugenics."

We admit all the above. Yet too often we select persons of mediocre ability with little or no training or no knowledge of the fundamental facts which control the child's physical environment.

It is universally understood that the proficiency of the school teaching force, and the progress of the school teacher depends primarily upon the desire of the teachers to improve themselves by preparing their studies outside the classroom; by attending teachers' colleges during the summer session, and taking advantage of certain extension or correspondence courses during the year. Since the salaries of janitors in large cities range from $750 to $4,000, and often average higher than the salaries of teachers, it is highly important that the personnel of the janitorial force should also make some kind of effort for their improvement.

It took a great many years for us to even recognize the problem of getting qualified janitors. Recently we have made some progress in that line. With the introduction of complicated heating, lighting, and ventilating systems and with modern methods of housekeeping and cleaning, the work of the janitor is becoming more and more a science, which involves special training.

Ways of Improving Janitor Corps

1. There are perhaps three ways in which the janitor-engineering corps may be improved. The first of these is by eliminating from that body, all those janitors who, because of physical disability or on the ground of service rendered, are below the average in the school system. But we at once run up against the problem of securing a sufficient number of qualified men and women who are willing to accept the places; also, the average janitor today is so poorly trained that such a standard is not a proper standard by which to regulate the service in that field. Such a plan would lead from one difficulty into another.

2. Another plan may provide that janitors entering the service shall have had certain preservice training. But since the inducements are not great enough, we would have great difficulty in securing proper candidates to take such training in advance. Such a plan would not take care of the present needs. Like the first, this plan gives little encouragement.

3. The third plan is that of taking the present corps as it is and training it, while in service, to do better and more efficiently the things they are going to do anyway. Here is where we can hope to get a genuine and positive improvement. The janitor will improve individually as well as collectively. In this plan, we can look for the greatest progress within the system as a whole.

Kinds of Improvement Necessary

A janitor may improve in the mechanics of housekeeping, in knowledge that constitutes his stock in trade, in his attitude toward his work.

1. The mechanics of a janitor consists in the many skills he must have in actually doing his work. He may improve these skills or he may become better adapted to the requirements of the school through increased ability to do well the routine tasks involved in school-housekeeping, through increased ability to cooperate with superintendents, fellow-janitors and supervisors, through increased ability to deal thoughtfully with children and teachers.

2. His knowledge or "stock in trade" gives him the point of view with respect to his work. A clear understanding of the principles of cleaning, heating, lighting, and ventilating will undoubtedly tend to make a broader and better janitor. Any fresh knowledge will increase his interest and zeal in the work, and so improvement is bound to result.

3. Lastly, he may improve in his attitude toward his work. A contempt for his position, once engendered, leads inevitably to the slighting of responsibility and duty which results in harm to the janitor, children, teachers, and system as a whole. So for the good of all, great care should be used to improve the attitude of the janitor toward his task. It may be developed by a proper recognition of his position in the school system. His attitude will determine, to a large degree, the value of his work. So a broader conception of the relation of his work to the school system is bound to affect his point of view or attitude.

Any course for the training of janitors, therefore, must train in the mechanics of cleaning, heating, and lighting, etc.; secondly, it must give the fundamental principles underlying these mechanics, showing the why and wherefore of their respective processes; lastly, it must create an interest, zeal, and favorable attitude in the work at hand, making for the best type of service.

Psychological Principles

Psychologically, from the learner's point of view, it certainly is a poor procedure or method which allows the wrong responses, unless through striking contrast the wrong way may lead best in calling attention to the errors and thereby lead to the right thing.

Since psychology teaches us that it is the reactions or responses we make which we learn, rather than facts, it behooves us to set up such a plan as will call forth those reactions which the janitor is later to use in his service. We must, therefore, put before him proper models so that he clearly sees and understands what he is to do and how he is to do it. With such models before him, we must see that he actually practices the desired reactions. Understanding how and why to do a thing is not enough and is altogether different from actually doing it. What we really learn are the reactions we make. What the janitor will learn will be the things he not only sees and understands, but actually does. In the words of Dr. W. H. Kilpatrick, "Precise practice with satisfaction, is the key to the situation." Whatever the type of training to be given, therefore, we must see that the janitor is faced with the situation which calls forth, on his part, the desired reaction. It is not enough to tell and to show him how to use a mop or broom, but he must actually use it; it is not enough for him to observe the best methods of heating, and ventilating, of which a system can boast, but he must actually fire the furnace and regulate the dampers, and then when his mistakes are pointed out, he must repeat the process until he fixes the right habits, and corrects the wrong responses. Practice under proper guidance and direction is the thing that counts; it is not enough to set down certain rules regulating his relationship with teachers and pupils, but he must be placed in a situation which calls for the desirable social responses and attitude on his part.

Any Plan Adopted Must Be Practical

Any system of training to be successful must give the janitor an opportunity, to not only learn to do with greater skill those common everyday tasks that janitors do anyway, but there must be provision for the development of a broader view of these daily tasks and provision for the choosing of higher and better methods. His period of service may, and often does, extend over a period of years. During that time new scientific discoveries and inventions come forth, changing the very nature of his duties. It is not only desirable but necessary, therefore, that he becomes familiar with the best thought and practice of the day. This takes time, study, and methods which require the janitor to actually do the things that he will be asked to do on the job. It is easier, perhaps, to reconcile janitors to being entertained by addresses of able speakers, on novel subjects, than to reconcile them to the study of heating, lighting, ventilating, cleaning, etc., unless the fundamental principles are concretely demonstrated, and, in which demonstration, the janitor is called upon to take part. By observation, demonstration, and participation, he will get a broader view of the skills, the subject matter and the underlying principles in his field.

If such provisions are made, the janitor will not only learn how to sweep, scrub, clean, and scoop coal, but he will get a broader view of his duties; he will see clearly why certain methods, devices, and equipment are to be used in preference to others; he will see the relationship of his duties to the system as a whole. All will result in the greater efficiency and a more scientific application of the underlying principles upon which his tasks are founded.

The Importance of a Proper Attitude

A proper attitude or mind-set is the driving force which carries a janitor to a successful day's work. In performing his daily task, the janitor who lacks the stimulus that comes from recognizing the worth of his services to the system as a whole, and who merely takes his work as a routine task, reduces the value of what he is doing. His attitude is the integrating force that unites his skill and knowledge and gives him new and broader points of view, and thereby, makes his work more meaningful to himself and those under whom he works. With this inspiration uniting skill and knowledge, a wider sympathy develops between janitor and pupils, teachers, and school personnel in general. Out of this more wholesome attitude, comes a clearer understanding of the relation of his daily tasks to the system and education as a whole. This finer appreciation releases new energy on his part. The importance of his position is recognized. Tasks which were a drudgery, in days gone by, now become a pleasure. He takes pride in finding out and setting up the best housekeeping standards. His tasks, as a whole, become more desirable, more satisfying, and far more worth while. It behooves us, therefore, to develop a proper attitude by providing means of developing higher ideals and broader knowledge in this field, by not only providing inspirational, scientific and intellectual lectures, and literature, but by bringing about the proper social and professional relationship with pupils, teachers, and colleagues. All of these conditions help to give a clearer vision of the importance of his tasks in relation to those of the pupils and teachers. Only by developing such sympathy and attitudes on the part of janitors and teachers, can the underlying principles of lighting, heating, ventilating, and cleaning be most efficiently translated into the daily practice for the good of all concerned.

Any Plan of Training Janitors Must Be Subordinate to the Educational Authority

If the superintendent is to be held responsible for results, not only from the instructional side but from the material side, he must be recognized as the chief executive officer of the board of education. The creation of a coordinate executive officer or business manager, who is given all authority in the training of janitors, cannot result in the highest degree of efficiency for the welfare of the children and school buildings. In large city school systems where it is necessary to have a business manager, under whose immediate direction janitor training is carried out, it is best to designate such officer as assistant superintendent, in charge of such affairs. Thus the policies, methods and devices of training janitors come under the direction of educational authority. The program for training of janitors can best be promoted by not neglecting important educational and social features necessary in developing an understanding and sympathy of the janitors. In fact, the services of school janitors are significant, only, as they contribute to the realization of the educational program adopted. It is folly to propose that an educational program can be carried forward with the greatest efficiency if those in charge of the school buildings are not in sympathy with educational authority and are not responsible to it. In order to avoid misunderstandings and divided authority, therefore, the janitor should be trained in accordance with broad educational policies which will develop a mechanical, scientific skill and at the same time develop a thorough understanding of the importance and relation of the janitor to the whole system. Likewise, by having such a course under the direction of educational authority, a proper relation of janitor and teachers can best be promoted. The janitor receiving his training under such policies will easily learn to cooperate at all times with principal and teachers, for the good of all concerned. By such a plan teachers can more easily be brought to understand the proper position of janitorial service in the school system. There should be a definite understanding as to the relationship of teachers and janitors with respect to extra and special duties which may or may not be required from time to time; likewise, the social relationship of janitor with pupils and teachers can be better guided and promoted. For convenience, it may be necessary to set down certain broad rules as guide posts. Unless these regulations are planned according to educational policies there is a tendency to make a mere mechanical machine of the janitor. This understanding and sympathy will, of itself, necessarily result in a proper attitude and greater efficiency of all concerned. In short, to be of the greatest success, any system must be subordinate to the educational authority.

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Assistant Commissioner of Education,
Trenton, N. J.

With the passage of a law creating a fifth assistant commissioner of education, the state commissioner of education of New Jersey has appointed Mr. Herbert N. Morse as assistant commissioner and assigned to him the work of supervision and direction of business matters.

Mr. Morse was first employed by the state education department in June, 1896, in an organization and clerical capacity. In 1898 he was appointed to the position of state supervisor of school census. In 1900 he was made chief clerk of the department of public instruction, serving in this capacity until 1919, when he was appointed business manager, acting as supervisor and director of business affairs.

Mr. Morse completed three years at the South Jersey Institute and one year and a half at Harvard College, and in May, 1896, was graduated from an expert accounting course in Philadelphia. He has studied school administration, and financial and pupil testing in courses at Teachers' College. Mr. Morse is a member of the National Association of Public-School Business Officials and has served as president of the association.

A Sound Financial Basis Necessary

We do not need to argue that any system of training must have some financial support to continue long. Necessary supplies, equipment, and expert instruction can be depended on regularly, only, when such financial support is certain. The equipment used by experts for demonstration purposes is supplied in some places by the manufacturers who, it is said, are glad of the opportunity to advertise. This plan of financing janitor-training seems to the writer manifestly unsound. The manufacturer will perhaps furnish some equipment and even an expert instructor for so long as it is a novel form of advertising for him, or so long as he sees that he is to get returns. But the moment the novelty is gone, the equipment and service stop and the plan breaks down. Besides, such a scheme is open to graft. It indirectly obligates the school system to buy its supplies and equipment from such advertisers, regardless of quality. Furthermore, such a scheme falls down when you try to apply it to a small school system or to the rural school situation because it simply will not pay the manufacturer to spend what is necessary to give proper training to janitors. If it will not pay him, rest assured he will not carry it on, because he is not going to run his business on a nonpaying basis.

So we must conclude that some sound financial basis must be had in any plan for training of school janitors, if we hope to be successful for any length of time. Any plan that fails to take account of this element, is doomed to failure from the beginning.

Summary

So in conclusion, at the risk of seeming dogmatic, let me recapitulate that any plan for the training of janitors, to be successful for any length of time, must be constructed on the fundamental elements given above, namely:

1. In-service training rather than preservice training or by a process of elimination of all below the average.

2. Kinds of improvement of individual janitors.

(a) Improvement in the mechanics of his service.

(b) Improvement in the knowledge of fundamentals underlying the mechanics of the service.

(c) Improvement of attitude and good will by increasing zeal and interest.

3. Psychological principles.

(a) What we learn are not facts, but the reactions we make, therefore, each task must be learned in the way it is to be done in actual service.

(b) Get proper models and devices to make clear exactly what and how each task or response is to be made.

(c) It is not enough to see and understand how each thing is to be done, but opportunity must be given each individual to actually do it. What we learn, we must practice.

(d) Call attention to the errors and avoid useless reactions. Practice under guidance must be had.

(e) A proper attitude toward work is necessary, if we wish a janitor to acquire skill, knowl-

(Concluded on Page 150)

The Scientific Supervision of Teachers' Marks

R. O. Billett, Principal of Harvey High School, Painesville, Ohio

School marks are the legal tender whereby student laborers are rewarded for their services. Maybe it should not be so, but it *is* so. Promotions, failures, elimination, graduation, and recommendations for positions depend on the assignment and distribution of marks. Moreover, that intangible but important *something* called school spirit is more intimately related to a fair, just, and equitable distribution of marks than most teachers and administrators realize. That school administrator is wise who insists on scientific methods of examining and of distributing marks. This is easier said, or admitted, than done. The inertia of tradition or superstition must be overcome before scientific marking finds its way out of the pages of texts and into the practice of teachers. Only in the past decade has anything resembling a science of examining and marking been developed.

It is the purpose of this article to discuss briefly two scientific devices which provide a satisfactory basis for examining and for distributing marks. These devices are the objective examination and the normal distribution curve.

Certain superstitions must be removed from teachers' minds before these devices can be generally accepted and used. One of these superstitions pertains to the old-type, essay examination. Many administrators perceive the advantages of the new-type, short-answer, or objective examination. But they hesitate to make it a part of their administrative procedure because of the notion held by themselves or more likely by part of the faculty, that a great deal is being lost through abandoning the old-time, essay type of examination. After taking off all the husks, the kernel of their objections seems to be that the old-type examination is an extremely valuable exercise in (1) English composition and in (2) the organization of facts.

Examinations Have No Teaching Objectives

Now all educators will admit that both of these objects are worthy aims of *education*. But few would call them essential aims of an *examination*. The educating process and the examining process are two quite different things. Therefore many practices which are conducive to one process may not be recommended for the other.

No high school requires less than three years of English—most require four years—of their students. All grade schools require eight years, (speaking in terms of the 8-4 plan). As a result of this training one surely may expect the student to develop the ability to write a good composition.

As for learning to organize facts—that is one of the main objectives in *teaching any* subject. The teacher presents facts, orally or through the printed page, and leads the pupil to organize them, to make tentative conclusions, to make deductions, to compare these deductions with more facts, to reorganize the whole, thus forming new tentative conclusions, and so on, until the logical organization of the subject matter is as complete as the course and the teacher can make it. Much evidence, both oral and written is required of pupils throughout the term to show that they have acquired this ability. This is true training in *thinking*. Holding all conclusions as *tentative* is not the least important phase of the process. But all this is educative. It properly has little to do with *examining*. If the ability to produce a good English composition and the ability to logically organize subject matter are not secured as the result of four years' effort in the classroom they will not be secured as the by-product of occasional, hastily written examination papers.

The administrator who admits the above to be true will have no qualms of conscience in recommending that his faculty abandon the old-type essay examination and learn the technic of the new-type short answer, or objective examination.

Fairness of New-Type Tests

He will recognize that the new-type examination is a valuable aid in making marking more scientific. It gives an accurate measure of the absolute and relative accomplishment of all the members of the class. It measures accurately, and independently,—the teacher's judgment, or emotional set, affecting the score not at all. It is diagnostic. When the scores are entered on a double-entry score sheet they reveal the weaknesses and strengths of each individual. It thus becomes a basis of review and of remedial instruction. The teacher is enabled to find out what is blocking the progress of the individual child and to remove the difficulty before he is hopelessly behind the class. The teacher who gives new-type examinations frequently, and analyzes the results, will not set a pace across the wild stretches of her subject which only a part can maintain. She will go back frequently and lend assistance to those not geared to maximum speed. The new-type test is fair. Three year's almost exclusive use of the new-type test by the entire faculty of the Harvey High School has not resulted in a single complaint from the 550 students concerned each year. No better evidence could be offered that the pupil regards the results of the test as fair.

Another common superstition which interferes with the fair assignment of marks pertains to *scholastic standards*.

Many administrators knowingly or unknowingly believe that a school can have only one scholastic standard. And that standard is measured solely in terms of subject matter. The ability of the pupil is to be taken into consideration not at all. Such administrators set the horizontal bar at a certain height and command all to jump. The fat and lean, the short and the tall, the athletic and the maimed, *every pupil,* yea, though he have no legs at all, yet he must clear the bar, *or he has failed.*

This concept makes out of school, for many pupils, a place similar to that where "Tantalus stood in a pool, his chin level with the water, yet parched with thirst and unable to assuage it; for when he bowed his head, eager to quaff, the water fled away, leaving the ground at his feet all dry. Tall trees, laden with fruit, stooped their heads to him—pears, pomegranates, apples, and luscious figs; but when, with a sudden grasp, he tried to seize them, winds whirled them high above his reach."

One Standard for All?

This superstition, of one standard only, and that in terms of subject matter, only, dates back to the days when the high school served but one class of people, the college-preparatory group. In those days only those of average or above average "abstract—verbal intelligence" were enrolled in high school. Now, in many states, all boys and girls under 18 years must be in high school. The schools enroll as many very superior students as ever, probably more. But in the same classes with these very superior students are now found students whose intelligence ranges down to very inferior. This fact that the inferior are being trained is not to be deplored. Twelve years of training is none too much for the prospective citizens of this country. The fact to be deplored is that there is a great tendency to run these pupils of tremendously varying abilities through the same educative machinery, at the same rate. Many, not emerging to suit, are run through the same machine again, and often, yet again.

To care for this wide range of mental ability homogeneous grouping is good. Complete individualization of instruction is better. But the former is limited to the larger schools and the latter is waiting on curricula and texts. In this transition stage the schools of the country must take care to avoid injustice to the mentally inferior by expecting them to measure up to the standard of the college-preparatory classes. The simple expedient of having a certain minimum mark for college certification and a still lower mark permitting the pupil to advance through high school, but not to college, will make possible the use of present marking schemes and still do justice to the low-ability pupil to whom the state owes an educational debt, as much as to any other.

A third psychological ghost which haunts the minds of many administrators, pertains to the relative difficulty of subjects. One need not be widely learned to become amused at the antics of this phantasm.

Relative Difficulty of Subjects

Which is most difficult, or which takes the highest type of mind, Latin or French or biology? Is it more difficult to learn a conjugation or to master the chromosome theory of the inheritance of Mendelian traits?

Which is most difficult—history or economics or algebra? Is it easiest to solve a quadratic equation, or to master the causes and effects of the Amercian Revolution, or to comprehend the causes and effects of the industrial revolution?

Which is most difficult—physics or chemistry or shorthand or English? Is it easiest to understand a sheet of hieroglyphics called shorthand notes, or a structural formula in chemistry, or a page of derived formulas dealing with falling bodies, or a Shakespearean sonnet?

The only sensible answer is that there *need* be no material difference in difficulty. All subjects may be made equally easy or difficult. Properly presented each and every one furnishes splendid opportunity for interpreting modern life to our pupils and teaching them how to organize subject matter logically, and to make deductions—in short, to think.

The idea, therefore, so commonly held by teachers and administrators, that a higher failing rate is more justifiable in one subject than in another, is mere stuff and nonsense, the result of a distorted or exaggerated notion concerning the place of one's own subject in the educational program.

All subjects may be equally easy or difficult depending on what is selected for the minimum essentials and upon how these minimum essentials are presented.

This is not an argument against educational guidance. Some subjects are better for some pupils. It is an argument against a teacher, in the so-called, college-preparatory subjects, expecting the low-ability student to accomplish more than a small fraction of what the high-ability pupil is able to accomplish.

The Normal-Distribution Curve

It is also an argument for the use of another scientific device as an aid to the fair assignment of marks. The new-type, short-answer, or objective examination has already been mentioned. The second aid is the normal-distribution curve. One of the chief objections to the

use of the normal curve in assigning marks is that subjects are supposed to vary so greatly in *difficulty* that varying failing rates may be expected.

It is true that in actual practice school systems show a ridiculous variation in the assignment of marks. The variation is frequently just as great among the teachers of a given system. These extreme variations are a constant and unnecessary source of administrative difficulty.

If the new-type examination were used for examining and the normal distribution curve were used intelligently for assigning marks, most of the difficulties and injustices pertaining to marking would disappear.

Many teachers and administrators now in service have never taken a course in statistics and many never will. To such people the normal distribution curve is a theory, not a reality. Whether they ever study statistics or not, they need to learn that the law of normal distribution is a fact, not a subject for debate. It exists as certainly as the law of chemical affinity, the law of marginal utility, or the law of falling bodies. It is operative wherever the measurement of any trait of any class of things, animate or inanimate, is attempted. One may stand at the door of the school building from one hour before the tardy bell rings till one hour after, and count the number of students who enter the door per given unit of time. He may arrange these in the form of a graph and he will have a normal distribution. One may measure the width of a thousand elm leaves, or count the serrations on their margins and make a graph showing the number having the least width, or the least number of serrations, and so on up to the number having the greatest width, or the greatest number of serrations, and he will have approximately a normal distribution. Or one may administer any standardized test, in any subject, to a large number of children and the scores will approximate a normal distribution.

Application of Normal Distribution

To assume that the ability to master history or Latin or any other subject, does not also follow a normal distribution is to assume that ability to master a given subject is a supernatural thing quite exempt from the natural law which governs everything else in the universe. Such an assumption is, of course, absurd.

To get any benefit from this normal-distribution curve we must first recognize its existence. There are two proofs of the existence of the law of normal distribution which any intelligent person can comprehend unaided by specialized knowledge of statistics.

The first of these proofs is based upon the well-known fact that the average of a great number of estimates is always the true value of the estimated quality or quantity. This fact is recognized in a modified form when it is said that "the truth of the matter is probably between the two extremes."

Have a thousand people estimate the width of a room and many of the estimates will be ridiculously high or low. But the *average* will be exactly right.

Similarly if the distribution of marks given by any teacher, on the basis of her own unaided judgment, is considered, almost any idiosyncrasy may appear. She may be inclined to grade too leniently, or she may be holding a so-called arbitrary standard unreasonably high, resulting in an abnormal number of failures. She may award all pupils the same mark to avoid "unfavorable" comparisons, as actually has occurred at times. If the administration is foolish enough to have a certain mark which exempts pupils from examination, this factor

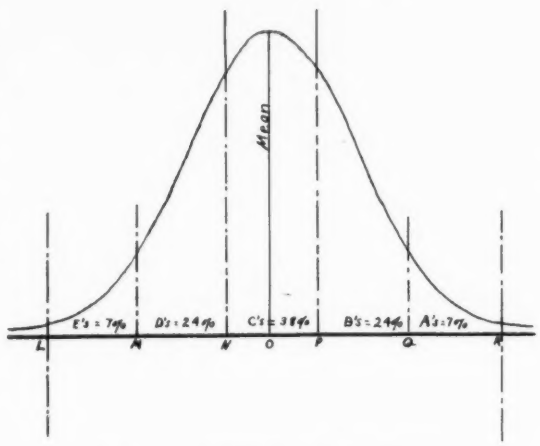


FIG. 1. A NORMAL DISTRIBUTION.

will result in an abnormal collection of marks at the exemption point.

The Standard Curve in Experience

But suppose a hundred thousand marks, issued by hundreds of different teachers, could be analyzed with respect to their percentage distribution. The law of averages would give us approximately the true percentage of marks to assign—average, above average, and below average. Such an analysis has been made.[1] A total of 96,853 marks issued in the elementary years of Cornell, Missouri, Harvard, and Wisconsin is distributed as follows—

A	B	C	D	E
8.2%	24.5%	38.0%	17.9%	8.7%

Here C is defined as average, B distinctly above average, D distinctly below average, A as very superior, and E as failure.

Literally hundreds of similar analyses, involving fewer cases, have been made in elementary schools, high schools, and colleges. The distribution has been found to hold for surprisingly small groups of pupils. Thus by empirical and inductive methods a standard for distributing marks has been established. If the teacher or administrator had no further information than the above, he would be justified in assuming the existence of a normal distribution, approximating the above percentages, and in using the above as an aid to his judgment when issuing marks.

However, there is another approach to the problem. An interesting mathematical procedure gives approximately the same distribution as that given above. Figure 1 represents a normal surface of distribution. The surface is divided into five areas by perpendiculars erected at l, m, n, p, q, and r. The entire surface is not included between l and r, but practically the entire surface is included. The areas above lm, mn, np, pq, and qr are respectively 7%, 24%, 38%, 24%, and 7%. *This distribution is strikingly similar to the distribution,* (mentioned before) *obtained from the analysis of approximately 100,000 marks.*

Another striking fact is that lm, mn, etc., each equal one *standard deviation*. It is unnecessary to resort to a mathematical definition of the term *standard deviation,* to get its significance. A standard deviation is the amount by which a given trait must vary from the average in order that the deviation will be perceptible to practically everyone.

To give an illustration—suppose the standard deviation of the stature of men is two inches.

[1]Starch, Daniel, "Educational Psychology," Page 442.

Per Cent Of Each Mark	7%			24%			38%			24%			7%		
Marks	E			D			C			B			A		
Frequency	2	3	3	2	7	8	16	13	10	15	14	14	8	11	13	3	2	3
Tally																		
Gross Scores	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159	160-169	170-179	180-189	190-199	200-209	210-219	220-229	230-239

FIG. 2. DISTRIBUTING THE SCORES OF 147 PUPILS ON AN OBJECTIVE EXAMINATION AND ASSIGNMENT OF MARKS ON THE BASIS OF NORMAL DISTRIBUTION. TOTAL POSSIBLE SCORE, 240 POINTS.

If the average height of men is 5 ft. 8 in., then a man 5 ft. 7 in. is not noticeably short, though a man of 5 ft. 6 in. would be classed as short, *because* he varies by at least one *standard deviation* from the average. Similarly, a man of 5 ft. 10 in. would be classed as tall. The standard deviation of noses is not so great. Therefore we say that "two inches is a lot on the end of a nose."

Applying the Principle to Pupils' Marks

Now what has this to do with the awarding of marks to pupils? A great deal. Figure 1 is accepted as the proper basis for awarding marks, the average of the C's will differ from the average of the D's or from the average of the B's by one standard deviation, an amount which is clearly perceptible. Of course the C's merge with the D's by imperceptible gradations like daylight into darkness. But the judgment of the teacher is materially aided by having five marks, A, B, C, D, and E which, at their average, vary from each other by an equal amount and that amount perceptible to all. How much better is this than the old 100% method where one pupil received 94% and another 95% but no one ever knew or could explain why! The gradations of the 100% scale were illusory because no human being's judgment is refined enough to recognize a difference of 1%. Furthermore there is every reason, empirical, as well as scientific, to believe that the distribution indicated in Figure 1 is true to the nature of things. The grading scheme then becomes: A = Very Superior; B = Distinctly Above Average; C = Average; D = Distinctly Below Average; E = Very Inferior.

The 100% system is objectionable not only because no one knows what 1% is, but also because no one knows what 100% is. Each teacher has his or her own notion. The normal distribution establishes the average *accomplishment* of the class as the standard by which the class is measured. This *average accomplishment,* unlike one hundred per cent, is a very definite thing, easily measured by the new-type test, and not subject to the fluctuations of individual whims.

Figure 2 shows a typical distribution of marks using the method of measuring and distributing herein advocated. This distribution is taken at random from the office files of similar reports submitted by the faculty of Harvey High School to the principal.

The test, whose scores are distributed in Figure 2, was administered to 147 freshman pupils in English. The highest possible score was 240 points. Such a test should be difficult enough that the best in the class may not get all of it. The scores on this test range from 60 to 239. The teacher should follow out the normal distribution mechanically, at first. She may then make such readjustments of "borderline" cases as her judgment dictates. The principal or superintendent should require a copy of each objective examination, with a distribution of scores and marks similar to Figure 2, to be filed at the office. These are especially valuable for final examinations. Pupils who need to take a special examination (as, for example, in case of students who have done summer studying) in any subject may be given the same test and may be assigned a mark, scientifically, on the basis of what the class scores of the preceding semester had been.

Another Aid

Teachers who once have mastered the technic of the new-type test and have once acquired confidence in the guidance of this scheme of distribution of marks, quickly perceive the advantages to themselves and to the pupil and refuse to return to the old-type essay examination and guesswork distribution of marks.

(Concluded on Page 149)

The Practical Value of Unit Costs in Public-School Teaching

Arthur J. Peel, Brookline, Mass.

In discussing the subject of scientific cost finding with school superintendents and managers, I have been led to the conclusion that school officials may be grouped into three classes; (1) those who know the value of scientific cost accounting, and are getting good results; (2) those who realize that such information would be of considerable service, but do not believe that it is possible for them to get it; and (3) those who either doubt its value, or are convinced that it wouldn't result in any change or improvement in their own administration.

Those who do not see the very vital relationship between school costs and educational values as expressed in public-school work, have difficulty in giving any serious attention to the matter of cost finding, and in this they are in no way to blame; for, if there is no demonstrable relationship of practical import, then cost accounting is certainly a superfluous and wasteful expense in any school superintendent's office. The possibility of failure to make the best use of costing factors as developed by records and accounts, is never absent in any organization in which cost finding is a feature; and evidences are not lacking that in some school offices, time, money and trained service have been employed in developing a mass of cost information which has been accepted merely as statistical information from which have been prepared pretty charts and graphs. In other words such information has been an end in itself, and not a means to an end. Even many commercial and industrial organizations fail to make the best use of the cost information obtained through the operations of an established system.

"Our business is to provide an adequate education for the children, regardless of what it costs in units," one superintendent remarked, when I commented on the fact that his records revealed no cost information that would enable him to make an intelligent comparison between one school and another in his own city, let alone a comparison between his schools and others, in the state. And within certain limits, he is right; just as the postmaster general is right, when he says that the duty of the United States Post Office is to collect, transport, and deliver mail for the people, regardless of what it costs. No one thinks that a two-cent stamp covers the actual cost of collecting, transporting, and delivering a letter sent from Boston to San Francisco. But the people pay the full cost eventually, for what is not met by the two-cent stamp must be paid in taxes. And we get no better postal service than what we actually pay for. The same thing applies to the public schools. But had it not been for the fact that the post-office department keeps cost accounts, the department might still have been operating its own airplane service at a cost considerably in excess of that which it now pays to contractors. Therefore, the people benefit as a result of the post-office department's cost-accounting efficiency.

Underexpenditures and Overexpenditures

Many people are under the erroneous impression that the only purpose of cost finding is to discover, if possible, where costs may be *reduced* without impairing efficiency or quality. Undoubtedly this is a very valuable and essential purpose of all cost accounting; but let us not forget that these same findings may reveal *underexpenditures* as well as overexpenditures. For example, if the cost of teaching English in a senior high school is ten cents per pupil hour, based on careful averages and accepted as a standard by a city, district, or a state, and in one high school in the state we find that it costs only seven cents per pupil hour, this does not necessarily mean that the latter school is more efficient; it probably means that English is not being taught as well in that school as in the majority of schools in the state.

But investigation need not end here: we may go on, if we have proper cost accounts, and analyze the situation in detail. For instance, is the teacher-salary cost below the average? If so, is it due to the fact that there are too few teachers, or (what amounts to the same thing), are the classes too large? Or, are the teachers underpaid? If not underpaid, are they competent? We might go on and investigate the cost of supplies, books, and so forth, and discover a parsimonious policy which deprives the students of all the helps that they should have to make the study interesting and resultful. But to work along this line, two things are essential, standards and cost records. And you can't have the first without the second, for the former must be based on the latter.

In Chart A will be found a general scheme of carrying through cost accounting to the point of utility. This chart is suggestive only and is in no sense to be taken as complete in any detail. It will be seen that of the five main divisions of school expenditure we have developed only one—that of instruction. Each and all of the others might be developed in the same way. In some school offices this is being done for the purpose of obtaining a total per-capita cost. But a word of warning may be in order just here; any unit or per-capita cost in which are included the cost of school maintenance and operation, the cost of auxiliary activities, and administration, is dangerous for comparative purposes. The only cost that is safely comparable, is that of instruction, and this includes teachers' salaries, supplies and books. Incidentally these three items constitute from 70 to 80 per cent of the total expenditure for public schools, exclusive of new buildings and improvements, and other capital charges.

Just how far it is advisable to go, in breaking down expenditure into distributed and classified divisions, is a question that cannot be answered dogmatically. I suppose the majority of school superintendents do get a cost by schools, and most of them obtain a per-capita cost per pupil for instruction, and frankly I don't quite see the value of this information alone.

Seeking Cost Factors

Suppose it does cost $87.86 to educate a child in School A, $100.74 in School B, and $94.80 in School C; of what use is this information unless we have more data? It is quite conceivable that it costs exactly the same to teach a child in one as it does in the other, and the difference is brought about entirely by the difference in school population in each unit. So many things suggest themselves as soon as we begin to think carefully on this point, that we see, at once, that we know too little to be able to arrive at any intelligent conclusion. But if we begin to build up some standards based on averages, we start something constructive and valuable. For example, suppose we find that the total average cost of teaching a child for one school year is $125.71, and then break up this figure into seven divisions, each representing a natural classification of public-school expenditure, we may develop a factor which will make it easier for us to get at fundamental causes:

Supervision	$ 5.53
Instruction	91.28
Operation	15.66
Repairs	4.48
Miscellaneous	1.45
Outlay	4.37
Health	2.94

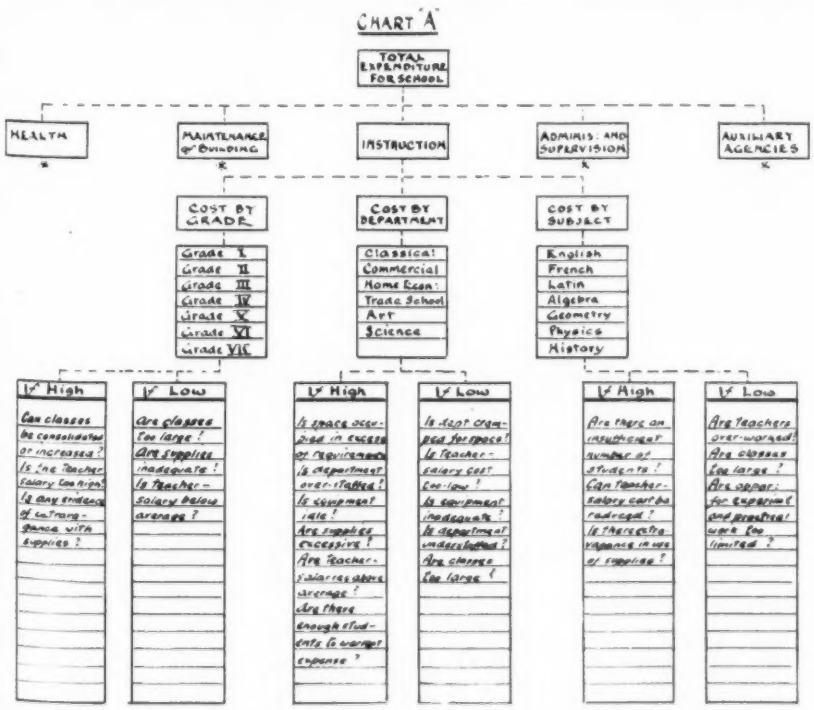


CHART A. SCHEME OF ACCOUNTING FOR LOCATING ABNORMAL COSTS.

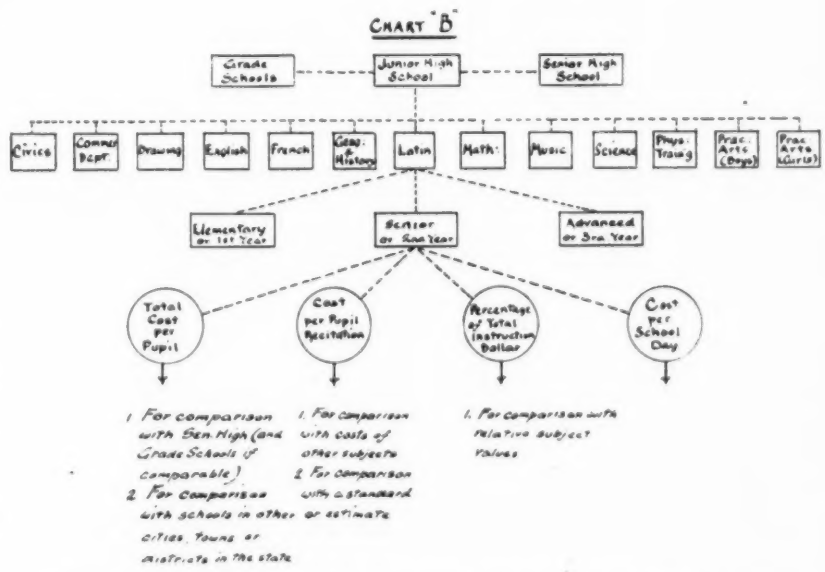


CHART B. SUGGESTION FOR DETERMINING SUBJECT COSTS OF INSTRUCTION.

We now have seven factors to compare with seven corresponding factors, and we need concern ourselves only with the one or two that show an appreciable variance. If one of these is the instruction cost, then investigation is narrowed to three items of expense—teachers' salaries, supplies, and books.

But even this does not tell the complete story. Teacher salary-cost is high, for instance: very well; where and why? A reference again to the Chart A will indicate a natural development of instruction cost: This may be (1) by grades (in grade schools); or (2) by departments; or (3) by subject—the two latter in junior and senior high schools, and vocational and trade schools. We have now got down to units of grade, department, and subject. A comparison of the cost of one grade with another grade, of one department with another department, or of one subject with another subject, is meaningless for all practical purposes.

It costs more to teach science subjects than it does commercial: What are we going to do about it? Nothing—there's nothing we can do. But if we have our basic standards, for comparison with actual costs, we have something to guide us, something that may reveal "a nigger in the woodpile." Of course, those standards must take into account population as well as items of expenditure; if our standard of student cost in the commercial department, for example, is $82.45, we must know that this is based on 850 hours' tuition in the school year, and on a definitely stated attendance. Any variation between actual cost and standard cost, will be due to one or more of three things: (1) Variation in total hours of tuition; (2) variation in attendance; (3) expenditure, higher or lower than standard. It is only in regard to the third cause that we need to investigate further.

Cost Finding Uncovers Conditions

Some of the reasons for high and low costs are shown on the chart—or rather, they are hinted at. Many others will suggest themselves to the practical school superintendent. I recall two cases where ascertaining the cost by grades, resulted in a consolidation of classes under one teacher, resulting in bringing the cost down to normal, even after increasing the salary of the teacher. Here is an instance where cost-finding uncovered a condition that had not been recognized until it was translated into terms of dollars and cents. On the other hand, a low grade-cost may be due to overburdened teachers, too large classes, and while there may be every good reason for remedying such an undesirable condition, the superintendent who, in addition to the schoolman's reasons, has a financial justification for splitting classes and engaging additional teachers, is in a stronger position with his board or committee than he who has only the pedagogic reasons.

I might go on and quote illustration after illustration to prove my point, that cost accounting in school business has a very vital and valuable relation to school administration and public education in all its various phases, but we have another step to go before we exhaust the possibilities of scientific cost finding.

The attention of the reader is now called to the second chart, Chart B. This chart is a somewhat more detailed development of one class of expense—*instruction*. It will be noted that we do not stop with the cost of teaching a subject, but go on from this point, until we evolve four kinds of unit costs or data. It will be understood, of course, that any or all of the subjects may be developed in the same manner as that indicated for Latin; and also, that the first- and third-year Latin may be worked out in the same way as the second-year.

When we have reached this stage in our cost accounting we might almost say that it has become so attentuated and refined that the clear line of distinction between the business function and the teaching function, is all but lost. This is true because an accounting as refined and scientific as this, throws a searching beam of light on conditions directly due or caused by pedagogic methods, policies, and teachers. Let me give a case in point: In a town well-known to me, the cost per pupil recitation in French, in the junior high school, is .092; in the senior high school the cost for the same subject is .149. The success of the French classes in the junior school is outstanding; the work is far more thoroughly done and the subject is popular. But in the senior high, the results are very poor; the increase in recitation cost is due to less pupils and a higher teacher-salary cost. Yet what would bring out this condition more vividly than the unit cost?

W. G. GRIGGS,
Superintendent of Schools,
Mobile, Ala.

Mr. W. G. Griggs of Bessemer, Ala., who was recently elected superintednent of schools at Mobile, succeeds the late Mr. S. S. Murphy.

Mr. Griggs is a native of Alabama, a graduate of Howard College, and has completed graduate work at the University of Chicago and Harvard University.

Mr. Griggs began his teaching career in the small-town school systems of Alabama. He became principal of an elementary school in Birmingham where he remained for five years. He was superintendent of schools at Gadsden for two years, and from Gadsden he went to Danville, Va. From Danville he went to Bessemer.

Mr. Griggs was a member of the committee which directed the changes in the Alabama constitution permitting taxation for public schools, and he acted as chairman of the committee which was responsible for the passage of the Alabama school code. He was secretary of the Alabama Education Association from 1904 to 1916 and was a member of its executive committee for five years. In 1916 he was made president of the Alabama Association.

Unit-Cost Accounting

Another instance: In a school in a southern state the cost of teaching commercial subjects was abnormally high, something like 25 cents per pupil hour. This high cost attracted the attention of the state department of education and an investigation was made, on the assumption that since the cost was comparatively high in that state, the quality of instruction ought to be exceptionally good, and graduates should be having no trouble in securing positions in the city. But the findings of the department were very different to the expectations! It was discovered that a large business school in the city boasted of the fact that a large percentage of its students were graduates from the commercial department of the public high school—half-baked product! One of the speakers at the N. E. A. convention this year said, in the course of his address, "If we shoot at the wrong mark, or miss the mark shot at, it does no good, and perhaps does harm, to increase the charge of powder." This is what had happened in the case of this school; they had gradually increased the cost of the department, in an endeavor to get better results, but had failed to keep their students in school long enough to secure a thorough training in commercial subjects. And how was this uncovered? By unit-cost accounting.

On reference to the Chart B it will be noted that one of the factors worked out is the percentage of the subject cost to the total instruction dollar, and that this is for comparison with relative subject values. For example, if the relative value of English to Latin is, say, 75 to 25, a theoretical ideal would be that it should cost only one third as much to teach Latin as it does to teach English. But we are on dangerous ground now; suffice it for us to say that a comparison of this nature may reveal that more money is being spent on a certain subject than is commensurate with its value to the student.

To obtain the cost per school day, seems, to me, to be without serious purpose, though I know of offices where this is being done. The purpose of this article is more to stimulate thought and inquiry, than to outline a system, or even to indicate very definitely what ought to be done. If any of our readers are interested in how to obtain unit costs, we would refer them to a small handbook[1] on the subject, in which is set forth a simple but effective system of cost-finding in public-school work.

[1]Peel, Simplified School Accounting. Bruce Publishing Co.

Park and Playground Accidents

O. W. Douglas, Chicago, Ill.

In treating a subject of such importance and with so many relations, the writer begs the liberty of noting some general national traits and conditions which surely have a bearing upon the subject at hand. It is a well-established fact that America has led the nations of the world in many lines of endeavor, both public and private. We have given the world a majority of great epoch-making inventions; we have excelled in education, philanthropy, and benevolences; but in the matter of safety to life and limb we have fallen woefully behind the old world. This applies not only to homicides but to accidental deaths and injuries.

Whether this lamentable condition is due to too much legislation, lax law enforcement, court delays, or to an ingrained temperament of indifference may admit of argument, but the fact remains that our national psychology has made possible too great a proportion of crimes of violence and of accidents. On the face of returns from the United States Census Bureau, police authorities, and other sources of information, we are shown to be very wasteful of human life. Law alone will not correct this condition, for law is impotent without the social will to enforce it.

When we examine accident statistics we find almost the same conditions as in the case of crime. In 1923 the total accidental fatalities in the United States amounted to 83,000 in round numbers; classified as follows:

Street and highway	22,600
Grade crossing	2,200
Street cars	2,000
Automobile not including grade crossings	16,500
Industrial	23,000
Home	20,000
Miscellaneous	19,000

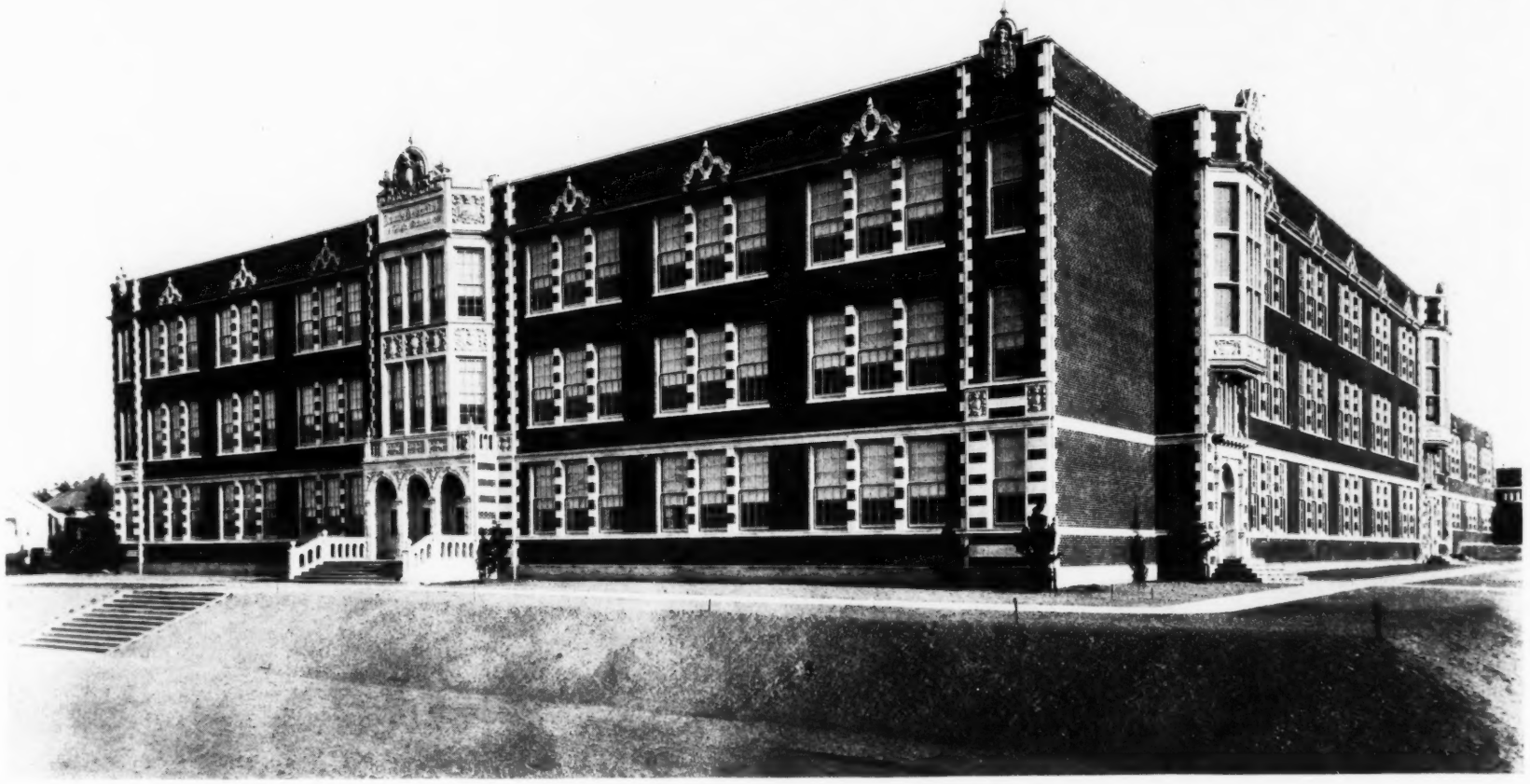
Nonfatal accidents rank as follows:

Street and highway	680,000
Automobile	570,000
Economic loss estimated	$600,000,000

The number of children under 15 years of age killed was 21,000; of these accidents 7,000 were on streets and highways.

The National Safety Council is an organization devoted entirely to the dissemination of knowledge and methods tending to the reduction

(Continued on Page 160)



GARFIELD HIGH SCHOOL, SEATTLE, WASH. F. A. Naramore, Architect, Seattle, Wash.

Recent School-Building Activity in Seattle

Thomas R. Cole, Superintendent
F. A. Naramore, School Architect

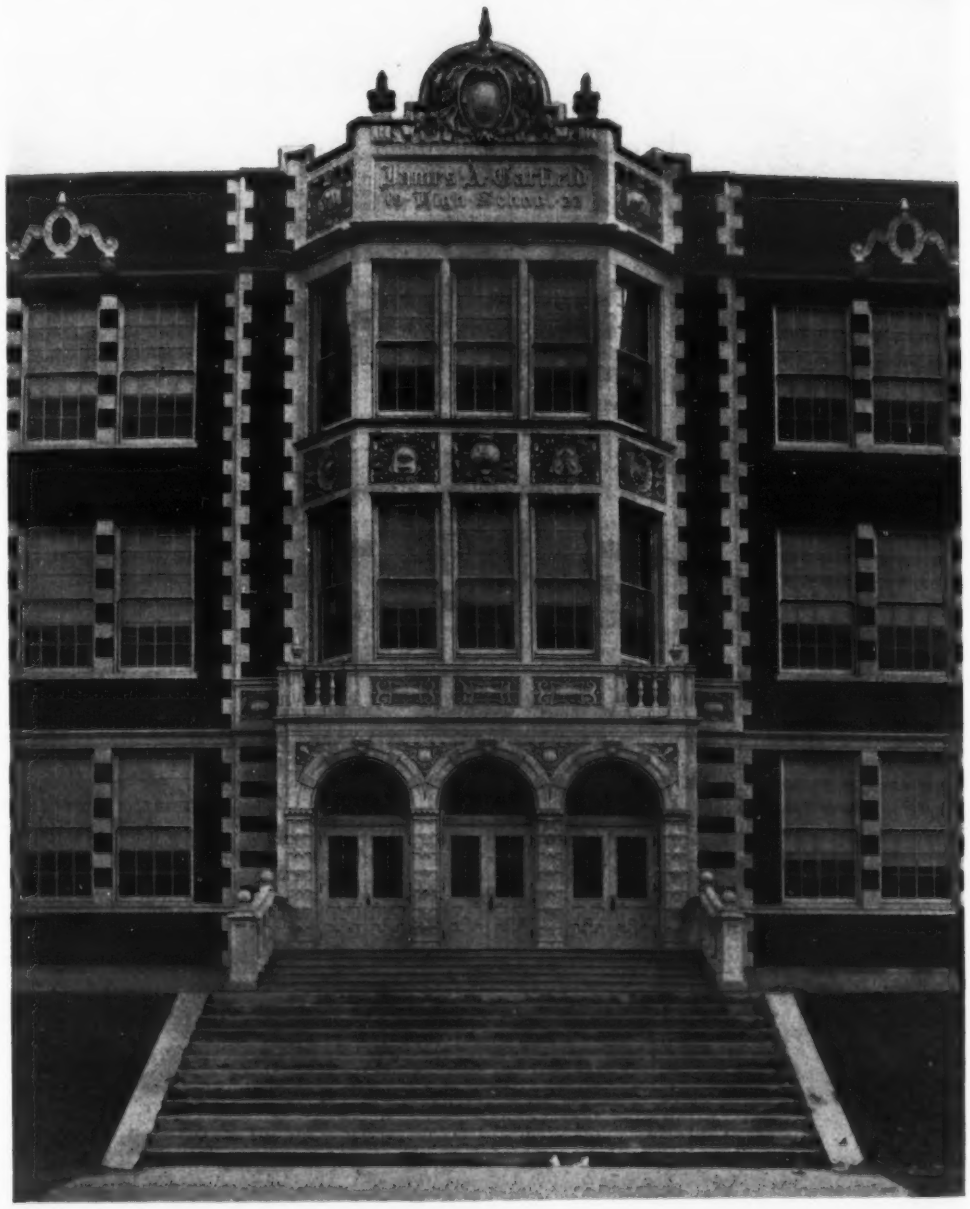
The year 1926-27 was notable in Seattle for the virtual completion of a $2,250,000 building schedule and the authorization at the polls of a new program calling for an investment of $2,400,000 in new sites, new buildings, and additions to present plants. Both propositions were decisively endorsed by the voters.

In exterior design, the Seattle buildings are relatively simple and conservative, the chief emphasis having been placed upon the adaptation of the interiors to certain educational requirements. Each of the two building programs mentioned in this article has been preceded by an exhaustive survey of building needs and trends of population. Locations for new buildings and additions have then been determined upon the basis of the survey findings.

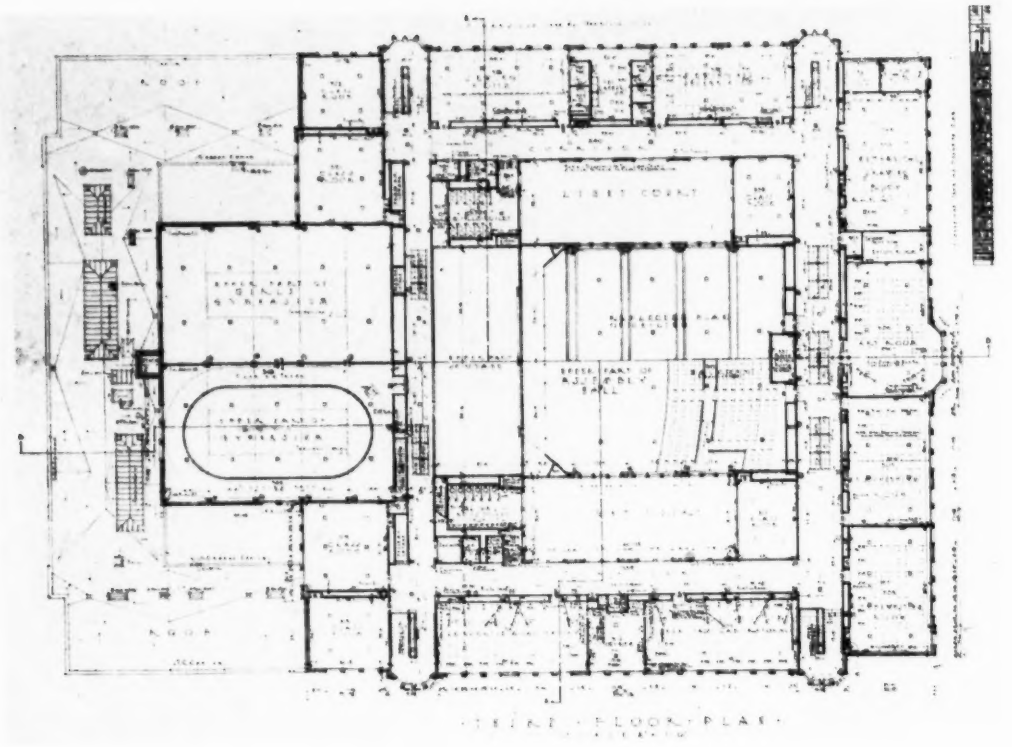
After the site of a new building has been located, the second step has been to organize the character of the educational activities which it is to house. In the case of an elementary school, for example, the question of whether or not the platoon organization is to be used has guided the formulation of the building design. In planning the intermediate (junior high) schools, the schedule of subjects has been worked out in full and a tentative daily program for each, based upon a careful estimate of the number of pupils to be housed, has been construed. In this manner the number and location of the various special rooms, as well as the equipment of each, have been fixed. While this has been a somewhat elaborate preparatory procedure, the result has proved to be a happy one as far as educational convenience and economy of space are concerned.

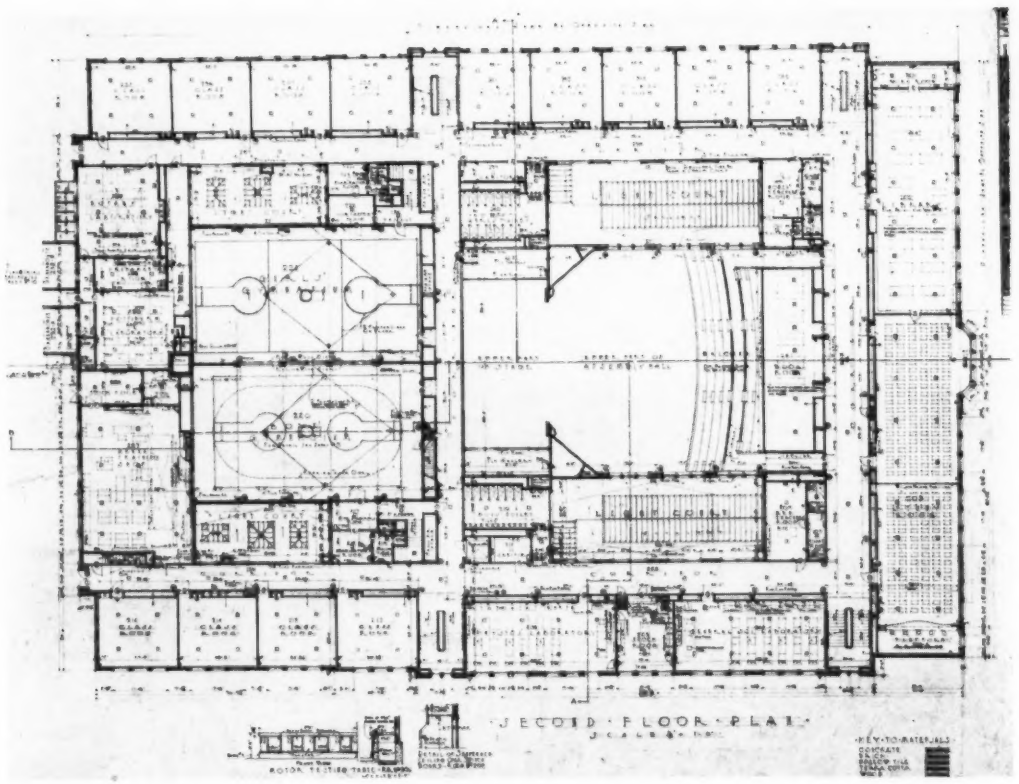
The 1925 Building Program

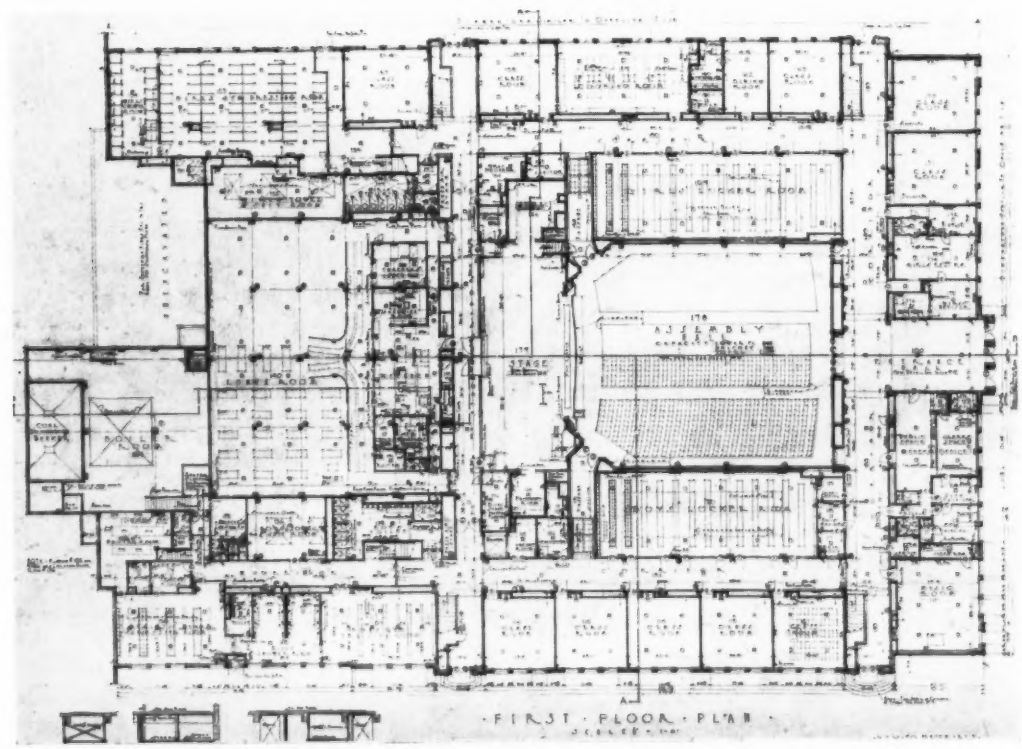
The building program now being completed was authorized in March, 1925. It provides the first unit of one new combination senior high-



ENTRANCE DETAIL OF THE GARFIELD HIGH SCHOOL, SEATTLE, WASH.







and-intermediate school and additions to two high-school plants, two intermediate schools, two elementary schools, and one addition to an elementary school. It was originally estimated that this schedule would house 5,840 pupils, but later adjustments brought the total capacity up to 6,270.

The Seattle Intermediate-School Plan

The Seattle intermediate-school curriculum is of the *constants-with-variables* type. The subjects in the seventh grade are prescribed, following largely the present elementary-school curriculum, with especial emphasis upon exploration and broadening of the pupils' interests. Eighth-grade pupils, under proper guidance, based upon careful observation of their reactions to the seventh-grade curriculum, are permitted one elective, while those of the ninth grade may have two.

Since individualization of instruction and educational guidance are basic considerations of the intermediate school, supervised study methods are used, and pupils are grouped according to educational needs. The curriculum has been planned to discover interests and capacities in order to make possible careful educational advisement in the selection of elective subjects, not only in the intermediate, but in the senior high school as well.

The school day consists of six periods of sixty minutes each. Teaching is organized upon the departmental plan. English composition and the social sciences are taught by the same teachers, making for a close correlation of these related fields.

The Seattle Platoon Organization

The Seattle duplicate or platoon-school program varies from that usually followed in several important particulars. The Seattle day, for example, is composed of six instead of four or eight periods. For the auditorium period, the Seattle plan substitutes special instruction in reading under a teacher who also serves as the school librarian. Supervised study in all academic subjects is also made possible, since the home-room teacher never has more than a single grade section in the room at any time.

Grover Cleveland Senior High-and-Intermediate School

The first unit of the Grover Cleveland High School, which is a combination senior high-and-intermediate school, was occupied on January 3, 1927, the contract having been let on November 14, 1925. Since the completion of the building is provided for in the new program recently authorized, the final cost figures cannot be given.

The exterior of this building is red face-brick trimmed with gray terra cotta. The interior construction is reinforced concrete floors, including attic and stairs. Partitions are of hollow tile. The roof is of mill construction. Heating and ventilation are provided for by the split system with thermostatic control and air washers.

Efficiency data and room schedule are as follows:

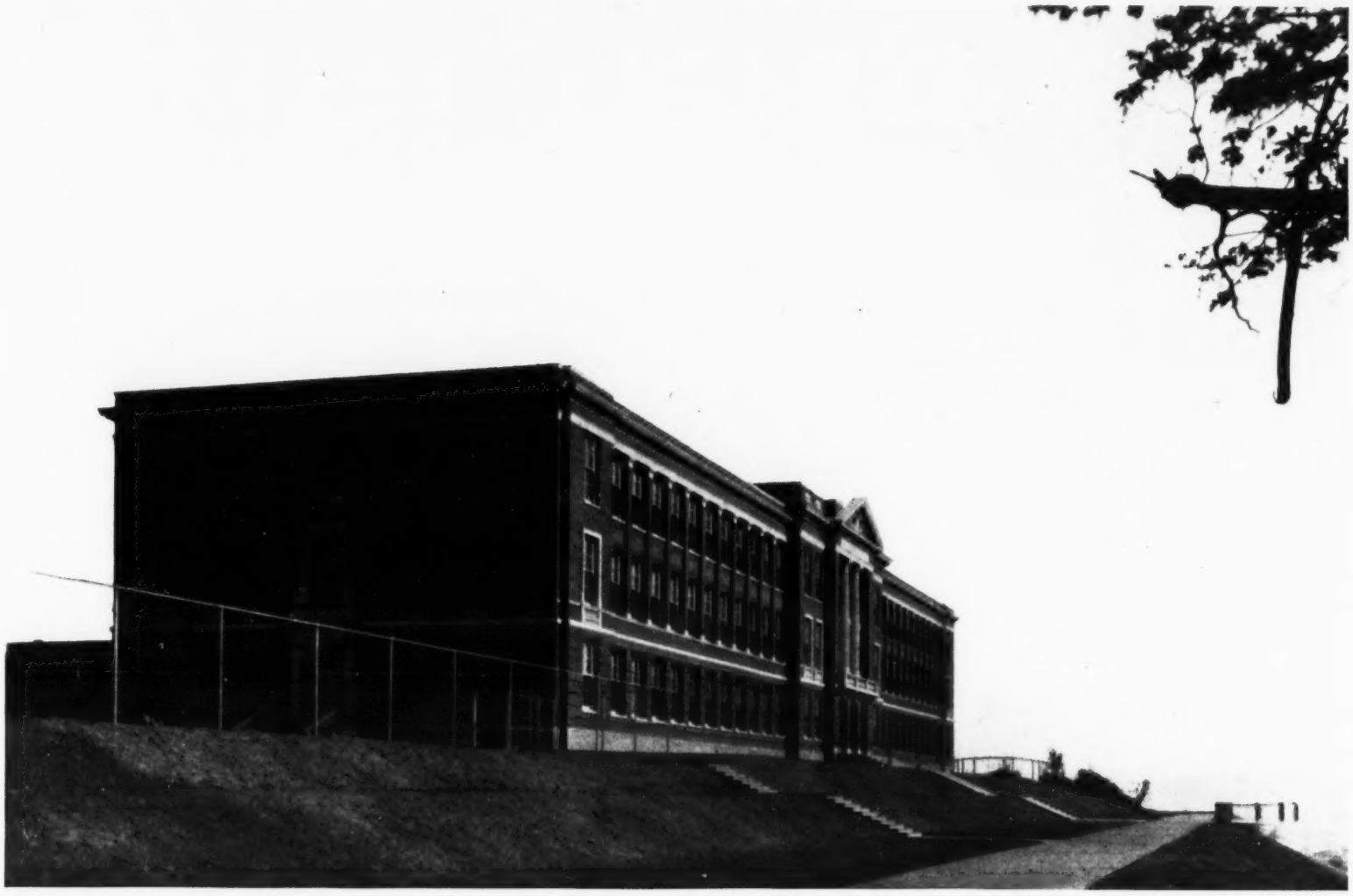
Percentage of Area of Complete Building Devoted to Various Purposes

Administration	11.3%
Instruction	51.7%
Accessories (luncheon, etc.)	4.4%
Corridors and stairs	20.0%
Ducts and walls	12.6%
	100.0%

Room Schedule

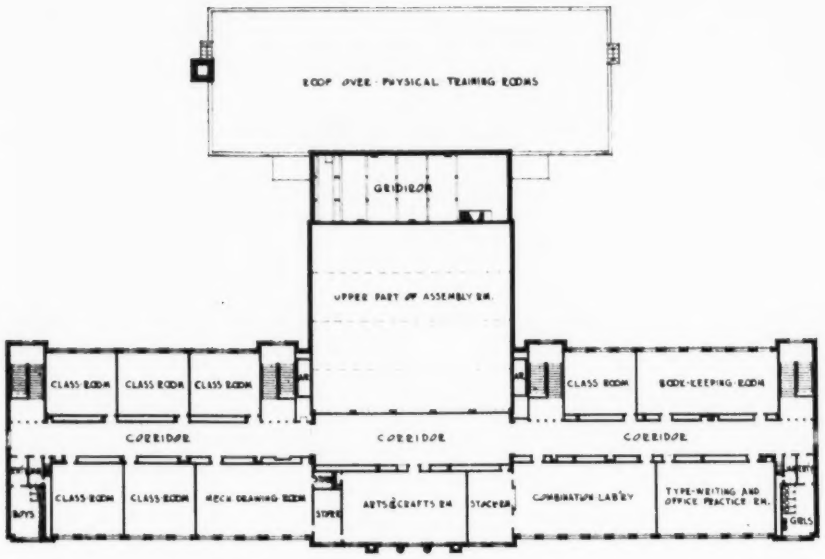
Classrooms[1]	7	@ 34	pupils	238
Classrooms	12	@ 41	"	492
Botany and general science	1	@ 30	"	30
Physics and chemistry	1	@ 30	"	30
Cooking	1	@ 30	"	30
Cooking	1	@ 30	"	30
Sewing	1	@ 30	"	30
Art	1	@ 30	"	30
Mechanical drawing	1	@ 30	"	30
Typewriting	1	@ 40	"	40
Bookkeeping	1	@ 30	"	30
Library study	1	@ 112	"	112
Gymnasium	2	@ 50	"	100
Total seating capacity				1250 pupils
Normal capacity (80% of total)				1000 "

FLOOR PLANS OF THE GARFIELD HIGH SCHOOL, SEATTLE, WASH.
F. A. Naramore, Architect, Seattle, Wash.

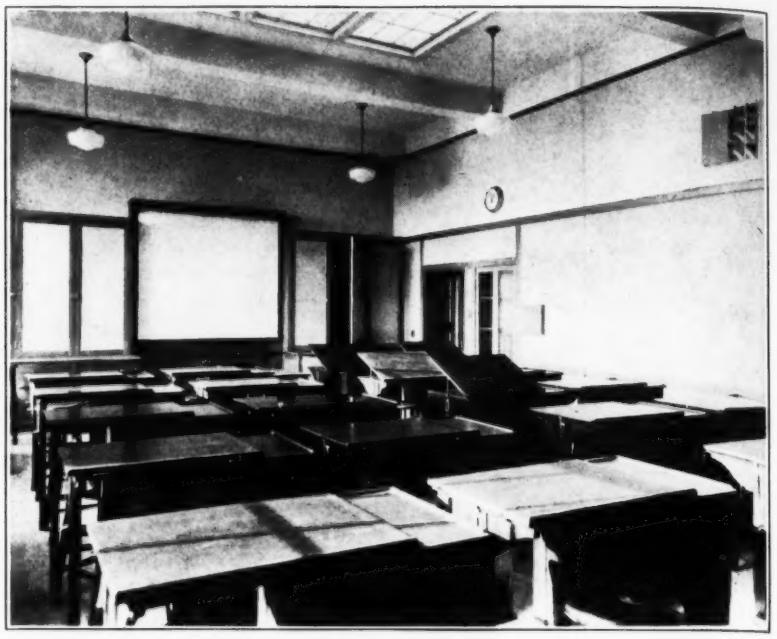


GROVER CLEVELAND HIGH SCHOOL, SEATTLE, WASH. F. A. Naramore, Architect, Seattle, Wash.

LIBRARY AT THE GROVER CLEVELAND HIGH SCHOOL, SEATTLE, WASH. F. A. Naramore, Architect, Seattle, Wash.

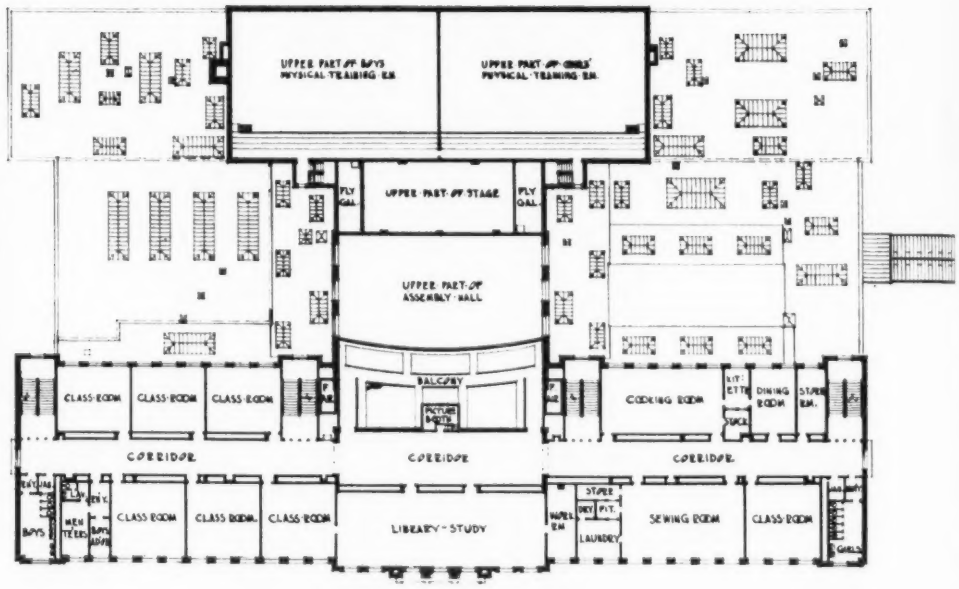


THIRD FLOOR PLAN.

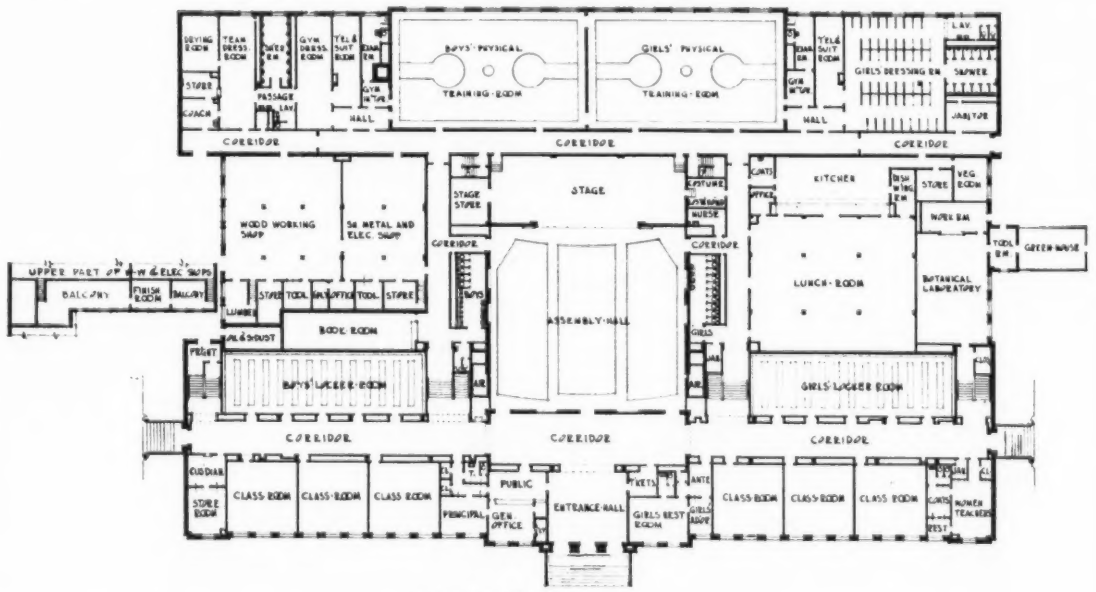


ART ROOM.

GATEWAY TO THE GROUNDS OF THE GROVER CLEVELAND HIGH SCHOOL, SEATTLE, WASH.



SECOND FLOOR PLAN.



FIRST FLOOR PLAN.

GROVER CLEVELAND HIGH SCHOOL, SEATTLE, WASH. F. A. Naramore, Architect, Seattle, Wash.

Sq. ft. per pupil normal capacity..... 99.3 sq. ft.
Assembly hall, capacity, ... 970
Lunchroom, capacity 300
[1]Classrooms include music room, oral expression, and other special rooms not listed as such.

The Alexander Hamilton Intermediate School

The Alexander Hamilton Intermediate School is the first plant to be designed especially for the Seattle intermediate-school program of studies. The school occupies a site one block square. The building was occupied on Februray 1, 1927, contracts having been let on January 2, 1926. The normal capacity of the plant is 1,450 pupils, the maximum seating being 1,702.

The exterior of the building is red face-brick, trimmed with gray cast stone. The interior construction is of reinforced concrete floors, including attic and stairs. Partitions are of hollow tile. The roof is of mill construction. Heating and ventilating is provided by means of a split system with thermostatic control and air washers. A distinctive feature of the building is the location, on the assembly room stage, of the cafeteria lunchroom, with a capacity of 300 pupils. Constant use is thus secured of space which would otherwise be utilized much less frequently. Efficiency data and the room schedule are given herewith:

Efficiency Data

Administration	14.2%
Instruction	50.5%
Accessories (lunchroom, kitchen, etc.)	1.0%
Corridors and stairs	22.4%
Ducts and walls	11.9%
	100.0%

Room Schedule

Classrooms[1]	18 @ 39	pupils	702
	1 @ 36	"	36
	4 @ 35	"	140
	1 @ 29	"	29
	1 @ 32	"	32
	1 @ 54	"	54
	1 @ 60	"	60
	1 @ 64	"	64
Science rooms	2 @ 30	"	60
Cooking rooms	2 @ 30	"	60
Sewing rooms	2 @ 30	"	60
Art	1 @ 30	"	30
Elementary art	1 @ 40	"	40
Mechanical drawing	1 @ 30	"	30
Manual training	3 @ 30	"	90
Library study	1 @ 96	"	96
Physical training	2 @ 60	"	120
Total seating capacity			1702 pupils
Normal capacity (85% total)			1450 "

[1]Classrooms include music room, handwriting, and other special rooms not listed as such.

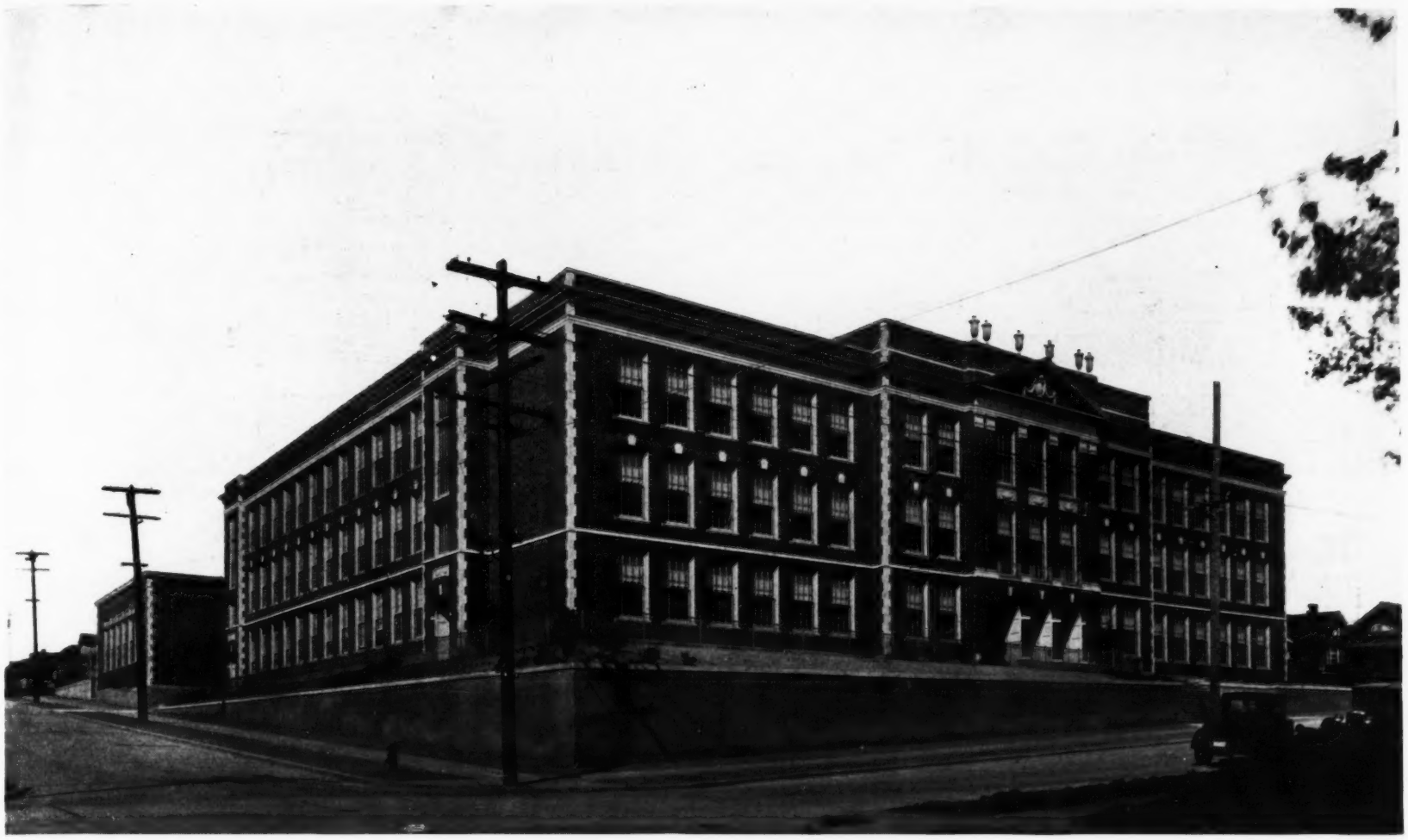
Square feet per pupil	Normal capacity, 65.5
Assembly room	Capacity, 500
Lunchroom	Capacity, 300

Cost

General work	$329,000
Heating and ventilating	74,000
Plumbing	23,000
Electrical work	15,300
Total	$441,300

Costs do not include landscaping, electric light fixtures, window shades, fixtures, or furniture (except "built-in" fixtures), and architectural and engineering services.

Cubic feet (not including tunnels)	1,606,000
Square feet (not including tunnels)	95,000
Cost per cubic foot	27.5 cents
Cost per square foot	$4.64



ALEXANDER HAMILTON INTERMEDIATE SCHOOL, SEATTLE, WASH. F. A. Naramore, Architect, Seattle, Wash.

William Cullen Bryant Elementary School

Besides marking the inauguration of intermediate schools in Seattle, the building program being completed is also notable for the erection of the first elementary school, the William Cullen Bryant, which is planned to meet the requirements of the Seattle platoon organization.

The school was occupied September 6, 1926, the contract having been let February 15, 1926. The exterior is of red face-brick with gray terra-cotta trimmings. The interior construction is reinforced cement floors and stairs. Partitions are of tile. Mill construction has been used for the roof. Heating and ventilating is by means of the split system with thermostatic control and air washers. Two features of the building are the specially designed reading room and the utilization of the assembly room for cafeteria purposes, the stage being located at one end and the kitchen and service counter at the other.

The schedule of rooms and efficiency data are given below:

Room Schedule

14 Classrooms	@ 40	pupils	560
1 Music room	@ 40	"	40
1 Sewing room	@ 40	"	40
1 Cooking room	@ 40	"	40
1 Industrial-art room	@ 40	"	40
1 Library reading room	@ 40	"	40
1 Physical-training room	@ 40	"	40
Total seating capacity			800 pupils
1 Play court.			
1 Combination assembly room and lunchroom, capacity			350
Square feet per pupil (800 total)			48

Cost

General work	$125.900
Heating and ventilating	22.800
Plumbing	10.100
Electrical work	5.300
Total	$164.100

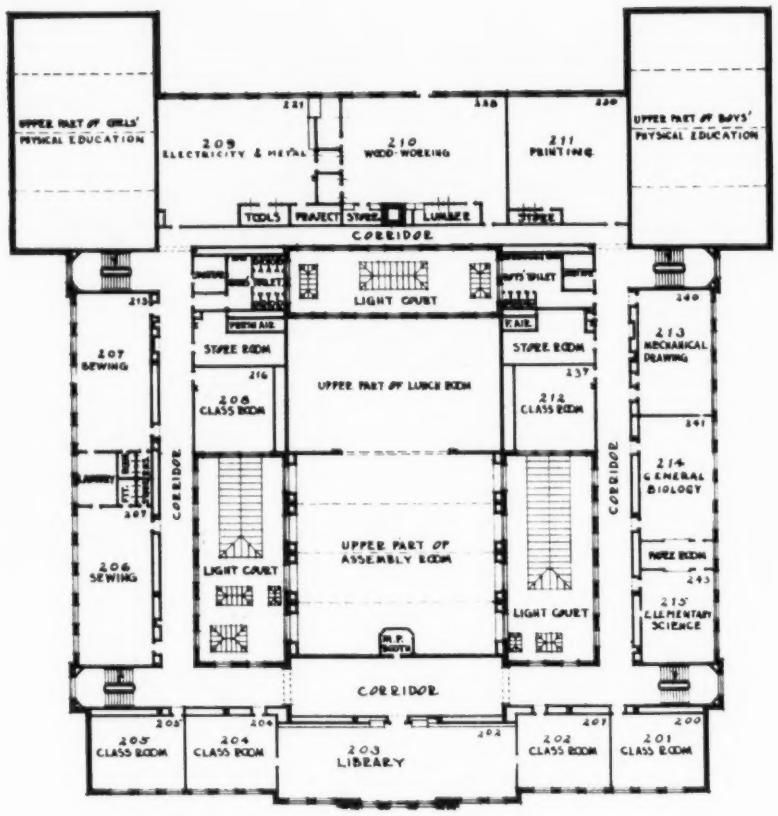
Costs do not include landscaping, electric-light fixtures, window shades, fixtures or furniture (except "built-in" fixtures), and architectural and engineering services.

Cubic feet (not including tunnels)	593.000
Square feet (not including tunnels)	38.000
Cost per cubic foot	27.7 cents
Cost per square foot	$4.32

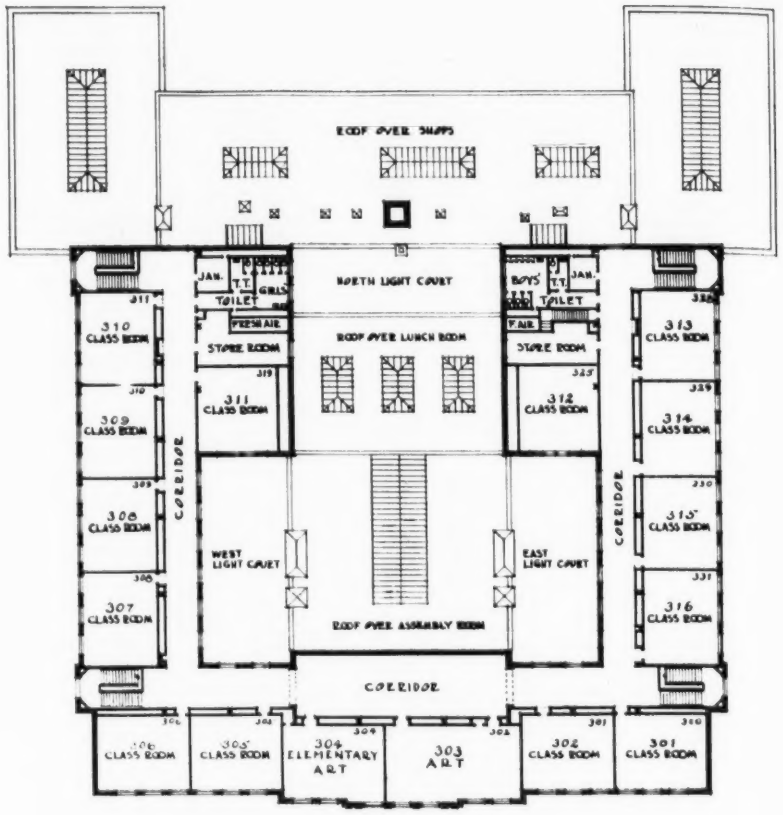
The Garfield High School

The Garfield High School has been carefully studied from the standpoint of structural design in order to obtain a well-balanced com-

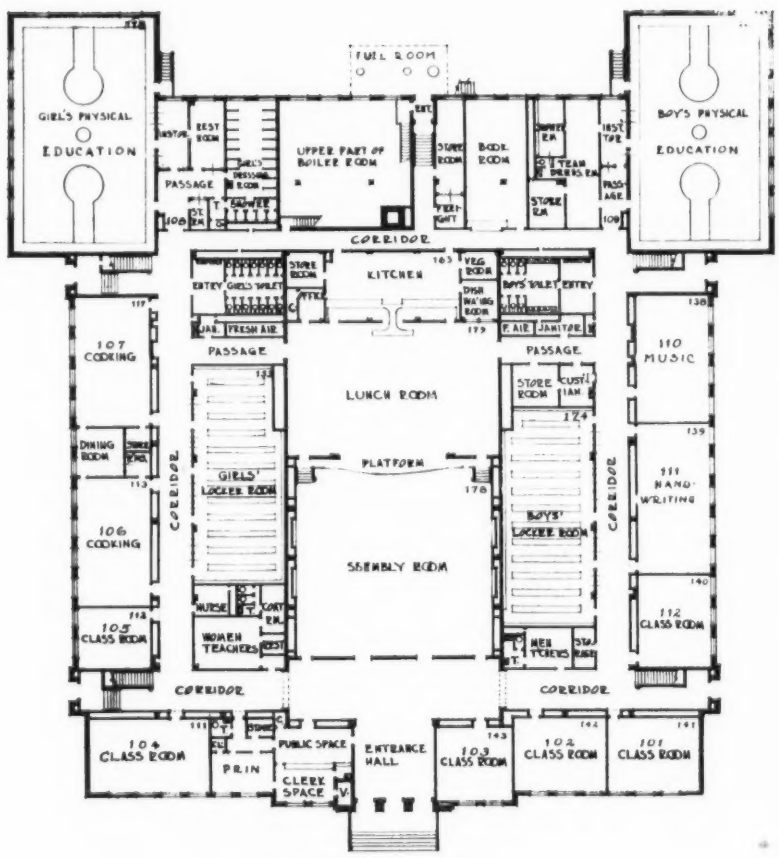
FRONT ENTRANCE OF THE ALEXANDER HAMILTON INTERMEDIATE SCHOOL, SEATTLE, WASH.



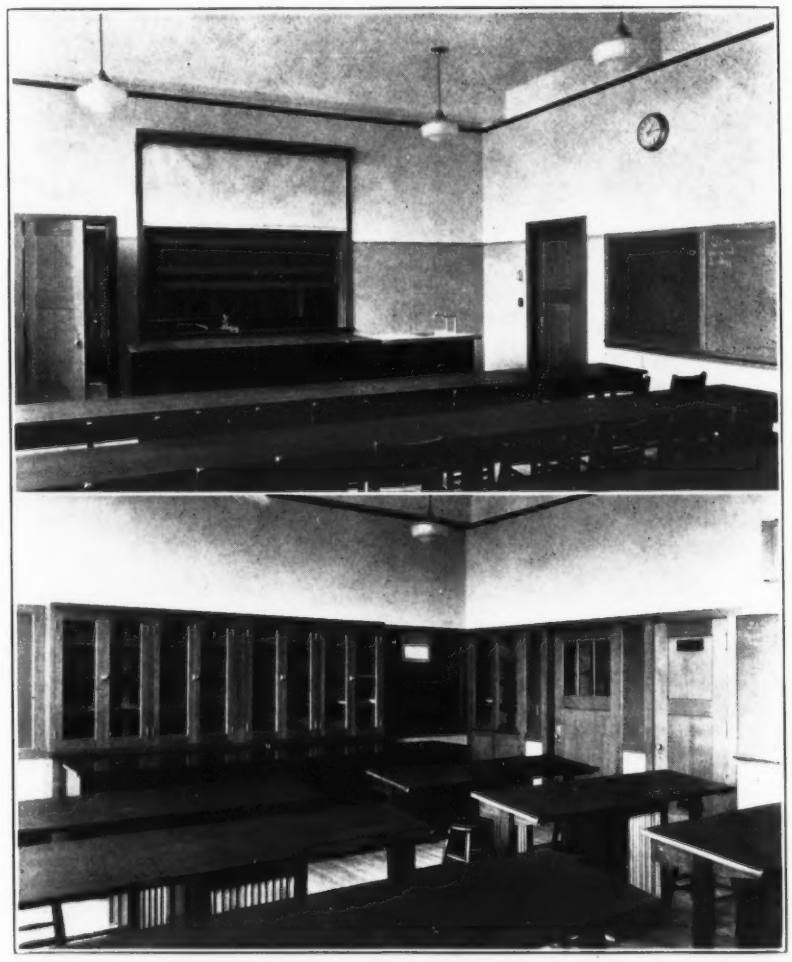
SECOND FLOOR PLAN.



THIRD FLOOR PLAN.



FIRST FLOOR PLAN.
ALEXANDER HAMILTON INTERMEDIATE SCHOOL, SEATTLE, WASH.
F. A. Naramore, Architect, Seattle, Wash.



GENERAL BIOLOGY ROOM (TOP) AND MECHANICAL DRAWING ROOM (BOTTOM) AT THE ALEXANDER HAMILTON INTERMEDIATE SCHOOL, SEATTLE, WASH.

bination of a structural building involving the economic use of material and ease of construction.

The building is of the skeleton type, with floor slabs, beams, columns, and walls of reinforced concrete, all of which, including the roof, were first erected before the brick veneer and terra-cotta trim were laid or any of the interior work was performed. Shelf angles, ties, and other supports, integral with the concrete, were provided in the concrete construction, for the support and anchorage of the brick.

The exterior brick and terra cotta were then completed. After the building was under roof, the interior work of erecting partitions, plastering, etc., proceeded without delays or conflicts with the masonry work.

The building occupies a site measuring about 340 feet east and west and 615 feet north and south. It faces north, but its longest dimensions are on the sides, so that the maximum number of rooms receive east or west light.

The size of the building on the ground is 198x351 feet. To avoid excessive stair climbing, the building proper was planned with three floors, the first being only slightly above the ground. The rear portion containing the manual-training shops, boiler room, gymnasium and dressing rooms, botany laboratory, lunchroom, and some classrooms is two stories high.

The framework, floors, and roof are built of reinforced concrete. All interior partitions are hollow tile, the building being fireproof throughout. The boiler room is located at the rear, with coal bunkers so placed that coal can be delivered from above and fed into the fire boxes by means of gravity and automatic stokers.

The building is heated by means of a split system operated with steam supplied by two water-tube boilers. The fans are so designed and placed that the assembly hall and gymnasiums may be ventilated independently of each other and of the classroom part of the building. Great care has been taken to avoid

WILLIAM CULLEN BRYANT ELEMENTARY SCHOOL, SEATTLE, WASH. F. A. Naramore, Architect, Seattle, Wash.

complicated and expensive systems of piping and ducts.

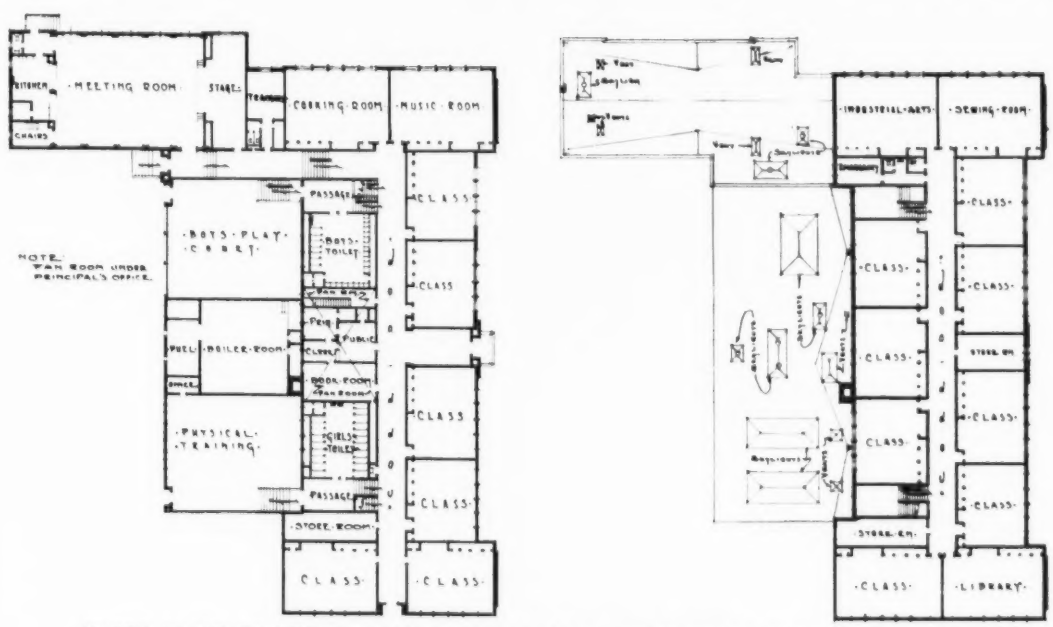
A freight elevator running the full height of the building is designed to transfer supplies and heavy articles to any floor. All rooms are provided with electric lights, and the fixtures are of a semi-direct design that give efficient illumination.

The exterior is Jacobean in style, with red face-brick and light gray terra-cotta trimmings. Such architectural embellishments as are used have been placed at the entrances and stair halls, the intent being to obtain a pleasing and dignified appearance without excessive cost in either irregular or odd-shaped plan or over-construction of ornament.

After orientation, the circulation or arrangement of halls and corridors is the next important consideration in school planning. In the Garfield High School this has been attained by placing the assembly hall and stage, general locker room, gymnasiums, and cafeteria in the center of the building, running the corridors around this nucleus and surrounding the corridors with classrooms facing the outside. In this way the best lighting conditions are obtained for the principal rooms of instruction, while those devoted to purposes where less natural light is required are placed in the center of the building. Four main stairways with connecting entrances are placed at the four corners of the main corridors, thus providing ample floor communication and exit facilities.

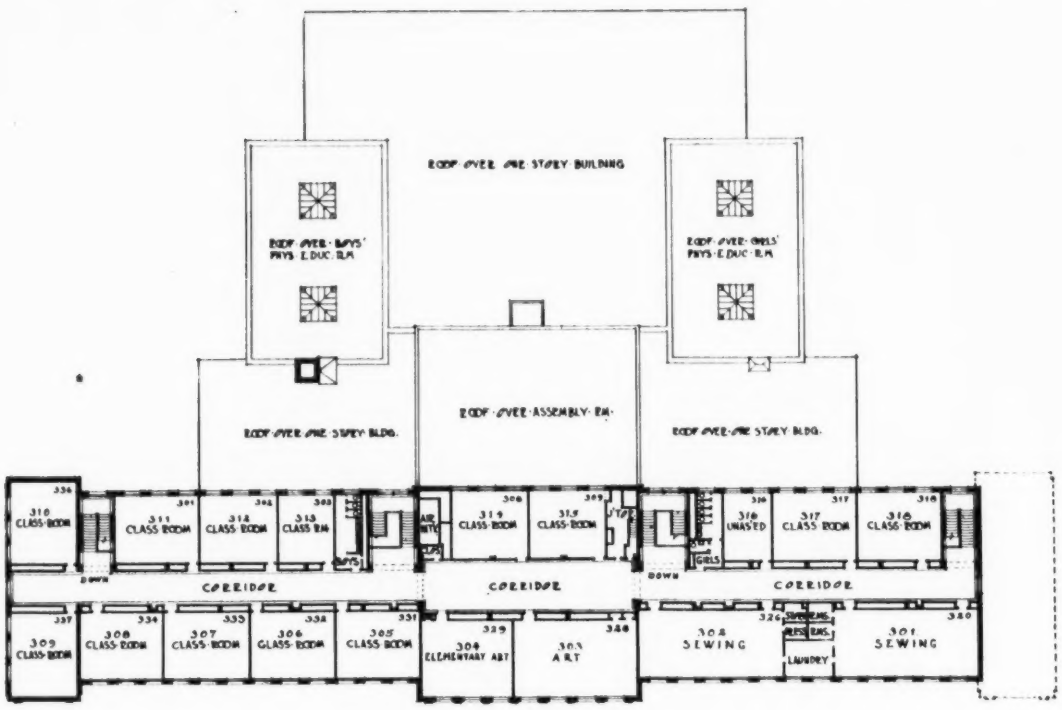
The laboratories are grouped together on one floor, with common stock rooms so that apparatus may be easily interchanged. This scheme of correlation of departments and rooms has been carried out through the entire building and rooms with similar or closely allied work, such as commercial science, art, domestic arts, etc., are grouped together.

There are two gymnasiums on the second floor, one for boys and one for girls. These

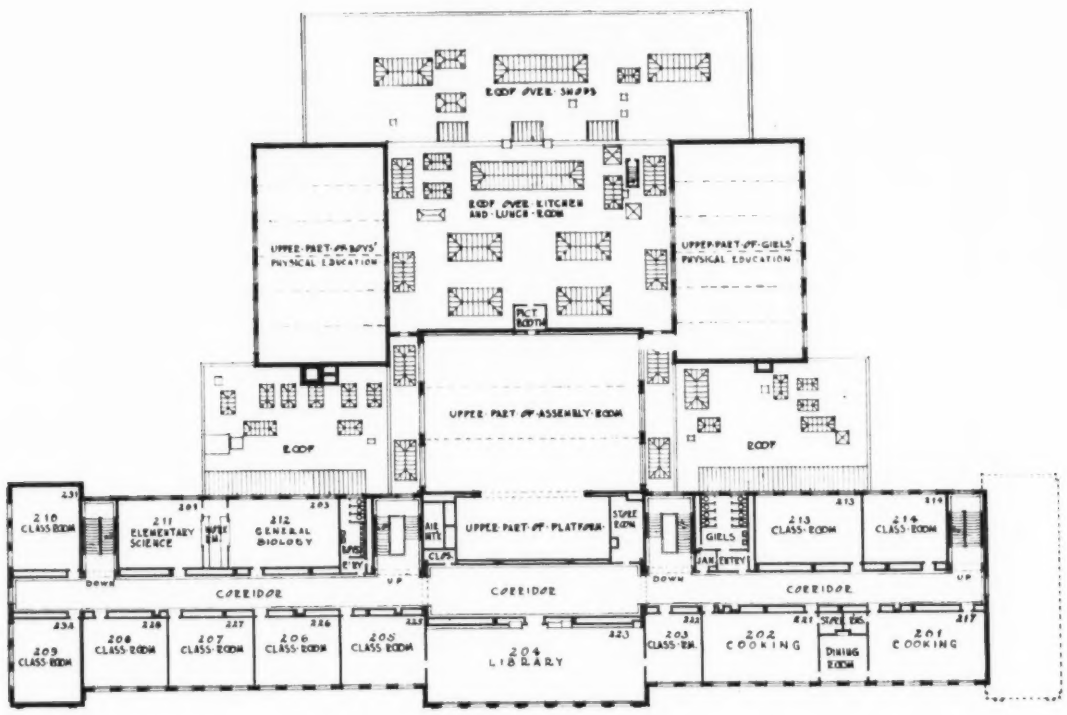


FLOOR PLANS OF THE WILLIAM CULLEN BRYANT ELEMENTARY SCHOOL, SEATTLE, WASH.
F. A. Naramore, Architect, Seattle, Wash.

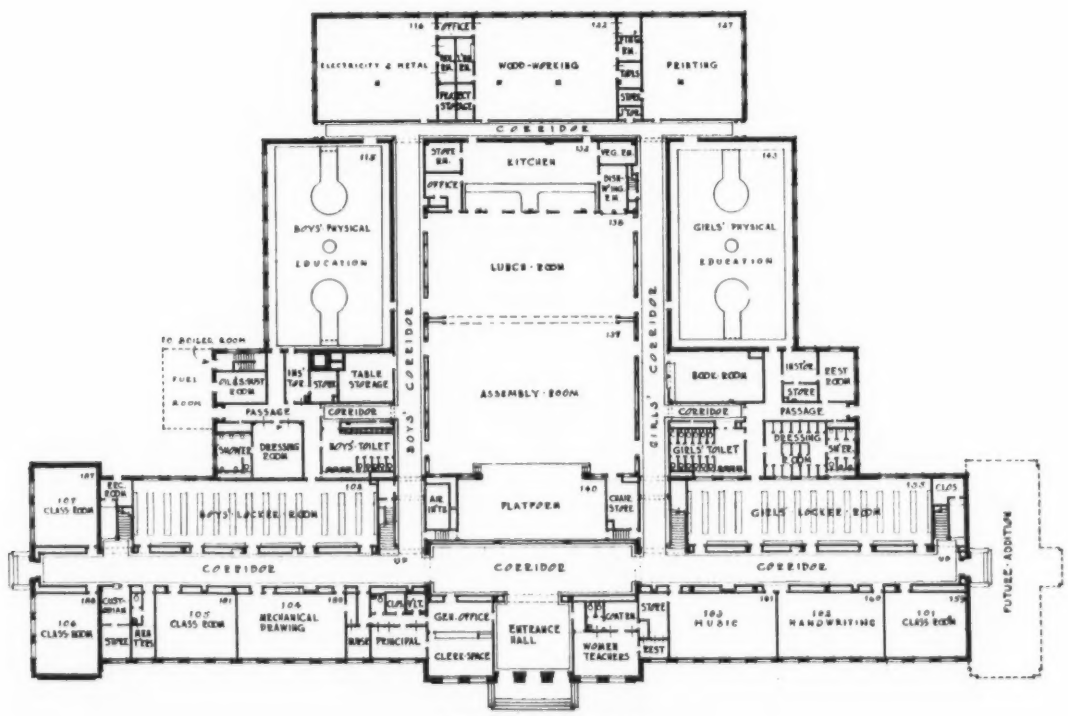
CORRIDOR OF ALEXANDER HAMILTON INTERMEDIATE SCHOOL, SEATTLE, WASH.



THIRD FLOOR PLAN.

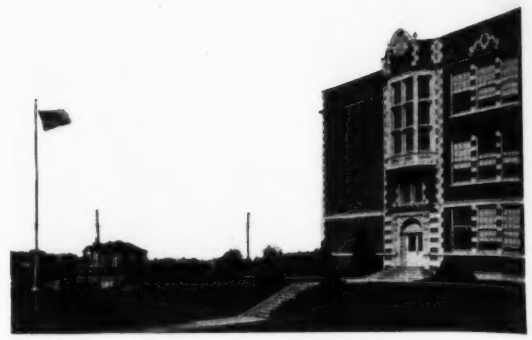


SECOND FLOOR PLAN.



FIRST FLOOR PLAN.

FLOOR PLANS OF THE JOHN MARSHALL INTERMEDIATE SCHOOL, SEATTLE, WASH.
F. A. Naramore, Architect.



ONE OF THE SIDE ENTRANCES, GARFIELD HIGH SCHOOL, SEATTLE, WASH.

rooms are adjacent and can be thrown together for special purposes by means of large rolling doors or partitions. There is a running track in the boys' gymnasium which can be used as a balcony during athletic contests. The gymnasium dressing and shower rooms are situated on the first floor and are directly connected with the gymnasiums by independent stairs. This whole department has been planned so that it is accessible from the outside without passing through the rest of the building.

The cafeteria is directly back of the stage, is lighted from the light courts, and thoroughly ventilated. It accommodates 350 students in each shift.

The building contains 27 classrooms, six science laboratories, four commercial rooms, one cooking room, two sewing rooms, one art room, one mechanical-drawing room, a music room, a study room, library, two gymnasiums, a cafeteria, an assembly hall and stage, and the necessary accessory and administration rooms. The building has a pupil capacity of 1,380 pupils. The classroom portion is three stories high and the various shops, the gymnasiums, and the auditorium have been carefully planned for maximum efficiency in instruction and administration.

The auditorium of the building, approximately 72 feet wide and 85 feet long, has a seating capacity of 1,250, of which 400 persons may be accommodated on the balcony. This balcony is one of the interesting structural features of the building. It is entirely of reinforced concrete, and has a clear span of 70 feet 4 inches as shown in the illustrations.

Cost Data

The cost data on the building is as follows:

General (including the improvement of grounds)	$453,000	
Heating	102,021	
Plumbing	39,205	
Electrical	21,000	
Clocks	5,273	
Elevator	3,294	
Total building		$623,793
Total mechanical	$170,793	
Per cent general	37.7	
Mechanical percentage of building	27.4	
Electric light fixtures	4,237	
Window shades	3,095	
Fixtures, furniture, and equipment (everything necessary to furnish the building, ready for the pupils to move in with the exception of books and supplies)	90,000	
Architectural and engineering services	35,000	
		132,332
Total cost of building		$756,125
Cubic feet		2,543,000
Square feet of floors, measured to the outside of walls		128,000
Normal student capacity of the building		1,380

This is 80% of the total seating capacity, not including the assembly hall.

The general contract, amounting to about $453,000 was let April 10, 1922. The pouring of concrete for the footings was begun May 29, 1922, and the entire concrete work was completed December 2, 1922. Brick work was begun in November and general interior finishing and plastering in January, 1923. The building was completed in time for the opening of the school

(Conculded on Page 150)

Some Factors Determining Types of School-Building Floor Plans

B. F. Pittenger, School of Education, University of Texas

The materials for this study comprise 290 elevation and floor plans for new school buildings published in THE AMERICAN SCHOOL BOARD JOURNAL from January, 1921, to December, 1925. These floor plans have been classified as "open," "closed," and "semiclosed," a plan being described as closed when practically circumscribed by four straight walls, as open when its inclosing walls are conspicuously broken for the better admission of light and air, and as semiclosed when indeterminate — when not clearly describable as either open or closed. The plans of each classification have, then, been studied in relation to the following possible determinant factors: (1) Number of rooms in proposed building, (2) number of floors, (3) number of rooms per floor, (4) geographical location, (5) community population, (6) purpose of building, and (7) year of publication of the plan. In conclusion, the type of floor plan is also studied in relation to type of roof and to the presence or absence of basement.

Of the 290 plans, 148 (51 per cent) are open, 98 (34 per cent) are closed, and 44 (15 per cent) are indeterminate, or semiclosed. While in the majority here, the open type is a comparatively recent development in the history of school-building planning, having achieved prominence since 1900. Before that time, dating clear back to the original one-room schoolhouse, the closed plan was the overwhelmingly popular type.[1]

1. *Floor-plan type and number of rooms.* If, as suggested by our definition of the open type of plan, this type exists for the purpose of providing for the freer admission of light and air to all rooms, then the open type should be common in many-room buildings, and the closed type should be preferred in buildings with fewer rooms. That this inference accords with fact is shown by Tables 1 and 2; the first of which shows the medians and quartile limits, in numbers of rooms, of each type of plan; while the second shows the percentages of plans classifiable into certain groups according to number of rooms.

TABLE 1—Floor-Plan Type and Number of Rooms
(Medians and Quartiles)

Type	Number of Rooms in Building		
	Median	1st Quartile	3rd Quartile
Closed	14	9	20
Semiclosed	18	11	26
Open	21	13	29

TABLE 2—Floor-Plan Type and Number of Rooms
(Showing percentages of plans)

	4-10 Rooms (63 plans)	11-20 Rooms (102 plans)	21-30 Rooms (67 plans)	Over 30 Rooms (58 plans)
Closed	51%	33%	23%	29%
Semiclosed	9%	21%	10%	18%
Open	49%	46%	67%	53%

In constructing these and later tables, the rooms counted in each plan include only those that are clearly intended for actual instruction; boiler and fuel rooms, storage rooms, closets and toilets, offices, teachers' rooms, foyers and lobbies, etc., were not counted. This procedure has probably worked to the disadvantage of large buildings.

Inspection of the tables reveals a clear relationship between floor-plan type and number of rooms. The semiclosed plans, being indeterminate, may be disregarded. In Table 1, the medians and quartile limits are approximately fifty per cent higher for the open than for the closed plans. In Table 2, the percentage of closed plans declines steadily with increase in the number of rooms, and that of open plans increases even more markedly with increase in number of rooms. The last group, of "over 30 rooms" plans, shows a reversal in both of these tendencies. But we seem clearly justified in the conclusion that the number of rooms to be housed in a building is a prominent factor in determining the character of the plan. If the rooms are few, the plan is likely to be closed; if many, open. But that other factors are operative is clear from the large percentage of exceptions to both of these statements, appearing in Table 2.

2. *Floor-plan type and number of floors.* Returning again to our assumption that the open plan has developed to provide a free access to light and air, it would appear that the number of floors in a building might have a bearing upon the type of plan. Given an equal number of rooms each, a four-floor building could be more readily adjusted to the requirements of light and ventilation than could a one-room building. In other words, the more floors that a building has, other things being equal, the more likely it is that it can be satisfactorily accommodated to a closed plan. The truth of this assumption seems to be demonstrated in Table 3.

TABLE 3—Floor-Plan Type and Number of Floors
(Showing percentage of plans)

	1 Floor (29 Plans)	2 Floors (80 Plans)	3 Floors (144 Plans)	4 Floors and over (37 Plans)
Closed	25%	35%	36%	30%
Semiclosed	0%	13%	17%	21%
Open	75%	52%	47%	49%

In counting floors for Table 3, a basement was reckoned as a floor, without checking to see that it always contained rooms for instructional purposes. This action was permitted on the theory that a basement at least made way for a larger number of instructional rooms on other floors.

The tendencies shown in Table 3 are directly converse to those shown in Table 2, even to the reversal of tendency in the largest (i.e., the "4-floors and over") group. Except for this group, the percentage of closed plans becomes greater, and that of open plans less, with each increase in number of floors. These contradictory tendencies, while logical, become more pointed when we note, in Table 4, a decided positive correlation between number of rooms and number of floors. We now confront the contradiction that, while the number of floors is distinctly and positively correlated with the number of rooms, a large number of rooms makes for a greater percentage of open plans, and a large number of floors makes for a greater proportion of closed plans.

TABLE 4—Number of Rooms and Number of Floors
(Medians and Quartiles)

Number of Floors	Number of Rooms		
	Median	1st Quartile	3rd Quartile
1 Floor	8	7½	13½
2 Floors	16	9	26
3 Floors	20	4	26
4 Floors and over	36	23½	51

3. *Floor-plan type and rooms per floor.* A partial and simple solution of this dilemma appears in Tables 5 and 6. Here, floor-plan type is studied in relation to the number of rooms to be provided on each floor of each building. This number is an approximation reached by dividing, for each building, the number of rooms proposed by the number of rooms. That we have here the vital element of the factor thus far studied seems clear from Table 6, which shows a more marked and consistent relationship with type of floor plan than appears in either Table 2 or Table 3. Without any exception, in the groupings made, the larger the number of rooms per floor is, the smaller is the proportion of closed and the greater is the proportion of open plans. In the number of rooms per floor, then, we seem to have a primary factor in determining the general type—whether open or closed—of a school-building plan.

TABLE 5—Floor-Plan Type and Rooms per Floor
(Medians and Quartiles)

Type	Number of Rooms per Floor		
	Median	1st Quartile	3rd Quartile
Closed	6	4	9
Semiclosed	6	5	10
Open	8	6	11

TABLE 6—Floor-Plan Type and Rooms per Floor
(Showing percentage of plans)

Type	2-5 Rooms (92 Plans)	6-10 Rooms (122 Plans)	11-15 Rooms (46 Plans)	16-20 Rooms (24 Plans)	Over 20 Rooms (6 Plans)
Closed	48%	29%	28%	25%	16.5%
Semiclosed	18%	13%	13%	12%	16.5%
Open	34%	58%	59%	63%	67.0%

But that this factor alone does not explain the situation is clear from the number of exceptions. Thus, returning to Table 6, we see that more than one third of the "2-5 rooms per floor" plans were open; whereas all should be closed if this were the only factor. Similarly, one third of the "over 20 rooms per floor" plans, which by the same logic should all be open, are either closed or semiclosed. Clearly there are other factors at work.

Some other factors that suggest themselves cannot be studied here for lack of data. One of these is the item of relative expense, set over against the ability or willingness of the community to assume the relatively greater cost of the open-type plan. This is quite probably a factor in causing the perpetuation of the closed plan in many large buildings. Also, there is the factor of the conservative *versus* the progressive community. Judging from their history, the closed plan may represent conservatism, while the open plan may be a mark of up-to-dateness. It is possible that the open character of some small buildings results from the imitation of large by small communities, rather than from any logical requirement of the proposed new building.

But there remain several other possibilities for whose investigation we have a limited amount of data. One of these is the matter of geographical location; a second is population; a third is the purpose which the building is expected to serve; and a fourth is the year in which each plan was issued. The importance of this last factor lies in the possibility that the open plan may still be gaining ground (as it has done since 1900), or that it may be standing still, or that its popularity may be receding.

4. *Floor-plan type and geographical location.* In Table 7, the 290 floor plans of this series have been grouped in four divisions—east, south, center, and west—according to the states in which the buildings were being constructed. The grouping of states adopted here is the same as that used by the United States Bureau of Education. The chief defect of this grouping, for the purpose of this study, is that the group labeled "west" includes such widely separated states as California, New Mexico, and Arizona on the one hand, and Colorado, Wyoming, and Montana on the other. School buildings in the first three probably resemble closely those in the south, while buildings in the latter three more closely resemble those in the central group. But any grouping is arbitrary and will have defects. It has seemed best to use one that already has authority behind it.

TABLE 7—Floor-Plan Type and Geographical Location
(Showing percentages of plans)

	East (93 Plans)	South (40 Plans)	Center (98 Plans)	West (59 Plans)
Closed	35%	20%	39%	32%
Semiclosed	17%	7%	16%	15%
Open	48%	73%	45%	53%

A glance at Table 7 shows that the open type is the preferred type everywhere; but that it is very popular in the south, and in the majority

[1] See volume on **School Buildings and Equipment**, of the Cleveland, Ohio, School Survey Report.

in the west; while in the eastern and central states it is outnumbered by plans of the closed and semiclosed types. The question at once arises whether these differences are due purely to geographical needs and preferences, or whether our former factor of "number of rooms per floor" may in some way be involved. Consequently, in Table 8, we have set down the median number of rooms per floor, and also the quartile limits, in plans proposed for each geographical area.

TABLE 8—Rooms per Floor and Geographical Location
(Medians and Quartiles)

	Number of Rooms per Floor		
	Median	1st Quartile	3rd Quartile
East	7	4	11
South	8	7	13
Center	7	5	9
West	7	4	10

These figures seem to indicate that the popularity of the open type in the south is related to the factor of rooms-per-floor. In terms of percentages (not shown here in tabular form), only 60 per cent of plans in this area, as compared with approximately three-fourths of those elsewhere, call for buildings with fewer than 11 rooms per floor; while 15 per cent of southern plans, and not more than 10 per cent of other plans, call for buildings with over 15 rooms per floor. The slight predominance of open plans in the western states does not, however, seem explainable in this way. There is possibly a true geographical factor here, in that the plentitude of cheap land invites the construction of low, spread-out buildings. Analysis of the plans shows only 10 per cent in the west to be over two stories, as compared with 31 per cent in the east, 27 per cent in the south, and 33 per cent in the central states. Low buildings are certainly a feature of school architecture in the southwest.

TABLE 9—Location, Rooms per Floor, and Type of Plan
(In terms of medians)

	East Rooms	South Rooms	Center Rooms	West Rooms
Closed	5	10½	7	6
Semiclosed	6½	11	7	5
Open	8	8	8	10

Table 9, which gives the median number of rooms per floor, in open, closed, and semiclosed plans, in each of the four geographical areas, throws a somewhat different light on the matter. Here the south is distinguished by a larger number of rooms-per-floor in the closed than in the open plans. There is no apparent reason for this relationship, which is the opposite to that shown in all of the other sections. The explanation possibly lies in the small number of closed plans available for this section. What has been said above about the "spread-out" character of western buildings is confirmed by the large number of rooms per floor marking the open plans in this area.

5. *Floor-plan type and population.* Table 10 distributes the plans according to type in relation to the populations of the places represented.

TABLE 10—Floor-Plan Type and Population
(Percentages of Plans and Medians)

	1-1,000 (45 Plans)	1,000-2,500 (33 Plans)	2,500-10,000 (64 Plans)	10,000-25,000 (37 Plans)	25,000-100,000 (52 Plans)	Over 100,000 (59 Plans)	Median Population
Closed	52%	36%	36%	32%	29%	22%	4,338
Semiclosed	11%	15%	14%	14%	21%	17%	23,804
Open	37%	49%	50%	54%	50%	61%	14,798

The expectations here are conflicting. On the one hand, city communities are generally regarded as more progressive educationally than are smaller communities; which factor, if it applies to school buildings, might operate favorably for the open type of plan. The concentration of wealth in the cities may also promote the open plan. On the other hand, school building ventures in large cities are frequently cramped for ground space, and the buildings are likely to be several stories high. Such conditions would favor the closed plan. The facts, as revealed in Table 10, are that open plans predominate in large, and closed plans in small, centers of population. This statement is necessarily true, of course, only of the plans included in this study.

But here again, as with the geographical factor, we may really have involved the factor of number of rooms per floor. Large population centers are likely to construct large buildings, and these, although tending toward several stories, are likely to house a considerable number of rooms on each floor. This question brings us to Table 11.

TABLE 11—Rooms per Floor and Population
(Medians and Quartiles)

	Number of Rooms per Floor		
Population	Median	1st Quartile	3rd Quartile
1-1,000	4	3	8
1,000-2,500	6	4	8
2,500-10,000	7	4	9
10,000-25,000	7	4	12
25,000-100,000	9	6	11
Over 100,000	11	7	16

It is clear that population and number-of-rooms-per-floor in new school buildings are very definitely and positively correlated. From this it seems to follow that the factor of number-of-rooms-per-floor, already seen to affect largely the determination of the type of plan, is, in part at least, responsible for this correlation with population. On the other hand, it is logically possible that the actual relation is the reverse, and that it is the population center which determines both the type of plan and the number of rooms per floor. In that case, the open plan should, it would seem, prevail in those geographical areas where the large population centers lie; but the opposite fact is shown in Table 7. The large cities are mainly in the eastern and central states, where the closed type is proportionally most numerous. While not conclusive, this fact, together with the common-sense interpretation of the case, strongly substantiates the theory that it is the number of rooms per floor that is the dominant factor. Whether or not population enters independently of this cannot be said here with any certainty.

6. *Floor-plan and building purpose.* We now turn to Table 12, which distributes the 290 floor plans according to type as related to the purposes for which the various buildings were intended. The "elementary" and "junior high school" classifications are self-explanatory. The "general high schools" are mostly traditional four-year high schools, so far as could be discovered, but include a few senior- and junior-senior-high-school buildings. The "elementary and secondary" group includes all general-purpose buildings designed to house together an elementary and high school. The "special" buildings are mainly for vocational schools.

TABLE 12—Floor-Plan Type and Building Purpose
(Showing Percentage of Plans)

	Elementary (103 Plans)	Junior H. S. (48 Plans)	General H. S. (115 Plans)	Elem. and Sec. (14 Plans)	Special (10 Plans)
Closed	41%	23%	35%	15%	30%
Semiclosed	12%	13%	17%	28%	10%
Open	47%	64%	48%	57%	60%

Table 12 shows that elementary- and general-high-school buildings have a rather larger share of closed plans than is consistent with the proportion of open and closed types in the entire series. On the other hand, junior-high-school, and general and special-purpose buildings have more than their due share of open plans. But here again it is possible that we are dealing indirectly with number of floors per room. Let us pass to Table 13.

TABLE 13—Rooms per Floor and Building Purpose
(Medians and Quartiles)

	Number of Rooms per Floor		
Purpose	Median	1st Quartile	3rd Quartile
Elementary	6	4	8
Junior H. S.	9	7	14
General H. S.	8	5	13
Elem. and Sec.	6	4	8
Special	6	3	9

It is clear from this table that the junior-high-school buildings, already shown to prefer the open plan, have more rooms per floor than have buildings planned for other purposes. This factor, then, at least partially accounts for the prevailing open plan in these buildings. But it will not explain the similar prevalence in the general and special-purpose buildings, which, if anything, have fewer than the normal number of rooms per floor. A distribution of these latter plans according to population and location brings out no significant relation, but it is possibly significant that all but three of them were published during the latter half of the period studied. This factor will be studied below. It is also possible that there are too few of these plans to make the relations here shown more than accidental.

TABLE 14—Floor-Plan Type and Year of Issue

	1921 (45 Plans)	1922 (48 Plans)	1923 (66 Plans)	1924 (62 Plans)	1925 (69 Plans)
Closed	38%	55%	31%	32%	22%
Semiclosed	22%	8%	16%	16%	13%
Open	40%	37%	53%	52%	65%

7. *Floor-plan type and year of issue.* Table 14 shows a marked decrease in the proportion of closed plans, and an even greater increase in that of open ones, over the five-year period represented in this study. The year 1922 is distinctly exceptional, however. It will be observed that the plans are here classified according to their order of publication, and not necessarily according to the order of their draughting or the order of the erection of the buildings. But doubtless these several orders are rather closely correlated. The consistent tendencies observed in Table 14 may mean again, however, only that buildings were increasing in size, or at least in number of rooms per floor. Here note Table 15.

TABLE 15—Rooms per Floor and Year of Issue

	Number of Rooms per Floor		
	Median	1st Quartile	3rd Quartile
1921	7	4	10½
1922	6	4	8
1923	8	5	10½
1924	8	5	11½
1925	8	6	12

It appears from this table that each succeeding year tended to bring a larger number of rooms per floor. The exceptional case of 1922 should again be noted. Here the floors were smaller, in terms of number of rooms, and here Table 12 has consistently shown a greater proportion of closed plans. Whether or not the year of issue has any effect cannot be said with certainty; but again we find distinct evidence of the influence of number of rooms per floor.

8. *Floor-plan type and type of roof.* All of the plans used in this study were accompanied by photographs of elevations showing the type of roof, whether flat, or slant, or mixed (i.e., a flat central portion with slant-roofed wings, or *vice versa*). Approximately two-thirds were crowned with a flat roof. Table 16, however, reveals a distinct tendency for the slant roof to correlate with the open type of plan.

TABLE 16—Floor-Plan and Roof Type
(Showing Percentages of Plans)

	Closed (98 Plans)	Semiclosed (44 Plans)	Open (148 Plans)
Flat	72%	64%	58%
Mixed	2%	2%	7%
Slant	26%	34%	35%

Table 17 reveals that the basic factor in determining the type of roof is the number of floors proposed, or height of building; the greater the height, the greater being the likelihood of the flat roof. Roof type has been studied in relation to all of the possible factors involved in the preceding studies of floor-plan type. Significant relations were found to exist with the factors of population and geographical location; but these are all explainable in terms of the factor shown in Table 16. There appears to be no evidence to indicate that year of issue has any independent relation to the type of roof.

(Continued on Page 149)

How Many Points for Character?

Charles H. Chesley

Some years ago the name of a certain teacher came before our school board for consideration as a candidate for reelection. The year before she had come to us well recommended, having taught in a distant township. She had taught in our rural school with marked success in the schoolroom. This was vouched for by the superintendent and by members of the board who had visited her school and listened to her methods. It was agreed that she was remarkably efficient as a teacher, she had the knack of exacting obedience from the pupils without visible effort, and the results of her good work were plainly apparent. Should we reelect her? There was just a wee bit of a fly in the ointment. Her actions had shown a certain remissness in character. It was rather a serious question to settle, and one which all school boards are called upon to face from time to time.

This case set me to thinking and suggests the title of this article. In the consideration of a teacher's qualifications, how many points shall we check off for character? In the case mentioned above, we decided against the teacher, for we felt that our boys and girls were entitled to have a teacher whom they could respect. We may have been right and we may have been wrong. That is the point we are about to discuss.

First, I wish to advance the argument that the rural teacher is more than an instructor in the things found in the textbooks. Anyone who has lived in a small community knows how mercilessly the searchlight of public opinion can be turned upon a person. There is but one person in town more conspicuous than the teacher. That person is the preacher of the gospel. We will say, then, that the actions of the teacher are bound to come in for a lot of discussion. Unfortunately, the men and women most addicted to discussing the actions of their neighbors are much more likely to tell of the bad, if it be there, than of the good. It is evident, therefore, that any misstep which the teacher may take is immediately chronicled far and wide. Her good deeds are accepted as a matter of course, while any bad qualities which she may possess are made much of. Considering the matter dispassionately, then, we are bound to believe that the teacher, male or female, teaches much more than the knowledge of books.

When the breath of gossip begins, the boys and girls are certain to get a whiff of it. The young people of today are analysts of merciless probity. When teacher falls down in the matter of character, Jimmie and Jennie find it out almost as soon as do their elders. They talk the matter over among themselves.

"She needn't try to tell me what is right or what is wrong. Guess I know enough about her!" That is Jimmie's verdict. Jennie whispers the "news" to Nellie at recess, and they go back into the schoolhouse with a cynical feeling toward teachers in general.

The female teacher is bound to suffer from the breath of gossip more than the male. With all due respect to my female readers, I submit that many of the female gossips are much more likely to be lenient in discussing the character of a young man than that of a young woman. This does not mean that all the gossips are of the gentle sex. On the contrary, some of the worst are masculine, but I contend that about eight out of ten of the gossips which "infest" rural communities are women. This means that the female teachers are bound to suffer most. It is evident, then, that the girl who goes into a country school to teach, goes to the most merciless place in the world.

We must admit that a good deal of the idle gossip of a rural community is absolutely unfounded. Here, however, we remember the ancient adage, "Where there is a lot of smoke, there is bound to be a little fire," and we remind ourselves that the teacher who walks with circumspection and dignity will keep practically free from the smoke.

If any young rural teacher is reading this, she is probably saying to herself, "What an old kill-joy!" Now, my dear young lady, I am not a kill-joy. I like to see you have a good time, but I want you to remember your dignity as a teacher. I want you to remember that you are setting an example for young lives to copy. Yes, they do copy teacher, especially the girls. If teacher goes to a questionable dance, it is hard for mother to explain satisfactorily to Jennie just why the action was wrong. Jennie knows how mother feels about it, even though nothing is said. Oh, yes, the boys and girls are mind readers as well as expert analysts.

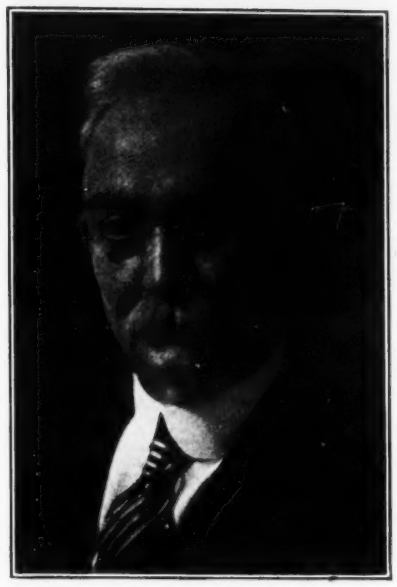
This brings us to the point we started out to make: Character should count one hundred points in the qualification of the prospective teacher. That was what we demanded in the case noted above and we found that public opinion was with us in the matter. We felt that the influence for evil, which even a slight straying from the straight path, would have upon the lives of the pupils should not be allowed. Perhaps I would not have felt as strongly in the matter but for the fact that I remembered the influence of a teacher upon my own life. I have never been able to forget that we boys lost respect for her and today I can see the ruin it wrought.

Perhaps some one will say that we are doing the teacher an injustice, in other words, we are ruining her career. Well! Tell me, I pray, which we should consider first, the teacher or the welfare of the school? We have been elected, and have taken oath of office to do the best we can for the boys and girls of the community. Can we, conscientiously, allow anything to come before their welfare? I think you will agree that I am right.

I am acquainted with a community, where, some sixty years ago, a preacher of remarkable character taught the village school year after year. This man died long before my day, but I have heard old men and old women, tell with shining eyes some of the precepts they learned from the sainted teacher. I can go into that neighborhood today and find men and women of four-score years who will gladly admit that the success of their lives has been due to the advice and example of this teacher. Sometimes I find myself wondering if this is not a monument more desirable than any of gold or world-wide fame.

It seems to me that the young men or women starting in life as teachers ought to feel the importance of their influence upon the young lives committed to their charge. If I find a teacher who does not, at least in some measure, realize and cherish this influence, then I know full well that such a one is not desirable for our community.

The city teacher lives a different life. While he or she must have character just as the rural teacher must have it, no one particularly knows or is interested in his or her comings and goings. I wish it might be the same, but it is not. We have to hire the teaching ability and we have to hire character; and we must have character that will stand the merciless probe of people who are always looking for flies in the ointment. That is why I submit that character must count one hundred points.



P. J. HALL,
Bethlehem, Pa.

A HALF CENTURY OF SCHOOL SERVICE

Nearly fifty years ago Peter J. Hall, then a young man full of vigor and ambition, entered the school system of South Bethlehem, Pa., as grade teacher. When the school bells ring on June 23 of this year they will have an unusual significance in that they will tell the world that Peter J. Hall has given a half century of service to the cause of American education.

He saw a hamlet grow into a good-size center of population, and he grew with that population in service and usefulness. He had risen to the principalship of the former South Bethlehem High School and served in that capacity for three years until that embodiment of all that is modern and beautiful in high-school facilities, Liberty High School, became a fact. Then he became a highly respected member of the new faculty, which position and place in the hearts of pupils and fellow teachers he holds to this day.

The respect in which Mr. Hall is held by his coworkers is attested by the fact that for the past three years he has been president of the Bethlehem branch of the Pennsylvania State Educational Association. He organized and was for two years president of The Industrial Club of Bethlehem, an organization devoted to the interests of vocational education and training in the schools of Bethlehem, and having a membership composed of teachers engaged in vocational training and men employed in the local industries and interested in the aims and work of the club.

Mr. Hall was educated in the public schools of St. Clair, Schuylkill county, Pennsylvania, at Pottsville and Millersville state normal school. As an instructor he was exceptionally strong in English, general history, and natural sciences. He was original in his observations of life and the cause of popular education. The school code on the basis of age limit requires his retirement. The board of education accords him the highest tribute ever expressed by that body. It recognizes to the fullest his contribution to the cause of education.

—The school district of Keokuk, Iowa, which filed suit to test the legality of the Brookhart-Lovrein law, has been given an injunction to prevent the payment of any interest into the state sinking fund. The Brookhart-Lovrein law provides that interest on public moneys shall be paid into the state treasury to form a sinking fund to reimburse public treasuries that become depleted through bank failure or improper handling of funds.

—Danville, Ill. Another bond-issue election is proposed by the school board. The ballot will be arranged in such a way that the people may have the opportunity of voting for the immediate needs, or for the $450,000 to rehabilitate the entire school system.

THE AMERICAN
School Board Journal

WM. GEO. BRUCE
WM. C. BRUCE } EDITORS

EDITORIAL

WHERE POLITICS AND THE PUBLIC SCHOOLS COLLIDE

If it can truthfully be said that there has been great progress in the domain of school administration in the United States, then it must also be held that much of this progress is primarily due to the elimination of practical politics from the precincts of the board of education. Here and there members of boards of education are still being chosen on partisan lines, but the nonpartisan or bipartisan idea has steadily gained ground.

With the elimination of the partisan idea, it still remained to discountenance all interference of the individual politician, the man who had selfish ends to subserve and who was not concerned with the general welfare of the school system. While much of this individual and group control which is not under regular political party domination still remains, it must also be said that in comparison with the conditions of a former day, the evil has been reduced to a minimum.

But political party control of school administrative affairs, which has virtually come to an end in the various municipalities throughout the country, occasionally manifests itself in a striking and aggravating manner. Chicago at the moment affords an example of just what we mean. The dismissal of a school superintendent became one of the issues of a mayoralty campaign, not because any one had any legitimate complaint against that official, but because the school system served as a convenient vehicle upon which to ride a campaign argument.

When a mayor of a large city wins an election upon the claim that the textbooks used in the schools are all wrong and that the educational leader should be driven out of town, then the assumption must be that either the town was afflicted with a bad school administrator or else that a campaign of misrepresentation had won the day.

The latter happens to be the case in Chicago. When all is said and done it will develop that the school books used in Chicago are no better or worse than those used elsewhere in the schools, and that the school superintendent was a high-class educator who would be a credit to any school system. But preelection promises must be carried out, which means a change of school books and a change of superintendent without the least thought of securing either a better set of school books or a better school superintendent. Campaign pledges must be redeemed.

Nothing more unfortunate can befall a school system than to become a prey to political contention and the victim of party prestige. It loosens the joints which hold the administrative structure in place and gives the ward healer an undue voice in saying who shall run the schools and how they shall be run. The board of education, being the creature of both mayor and city council, must demonstrate extraordinary strength of character, if it is not to be eliminated from the picture entirely.

The situation here described can only serve as an example of what should and must be avoided. The American cities that entertain the ambition to provide their youth with an efficient school system must first of all guard against political interference. In brief, there must be a separation between municipal and school government. The political fortunes of a mayor or alderman cannot be built up through a control of the school system without causing injury to the cause of popular education.

THE BOARD OF EDUCATION AND OUTSIDE AGENCIES

The modern board of education, as exemplified in American cities, is a representative body intrusted with the administration of the local school system. The financial support intended for the use of the schools may be regulated by state law, or subject to local governmental agencies outside of the board of education, but the expenditures are usually within reasonable control of that body.

The administration of the schools come, however, solely within the province of the board of education, and no other agency, either public or private, is vested with the authority to interfere. Nor do the laws in any state here contemplate such interference at the hands of other branches of the municipal government. A city council may have the authority to confirm the school budget and the mayor the power to veto it, but the general administrative control of the school system is usually vested with the board of education.

The interference with the proper exercise of that authority has in recent years come more largely through private than through public agencies. It is the individual or group factor, without official standing, that has demonstrated the greatest opposition to the orderly government of the schools. These manifestations of irritableness with what school authorities have decreed have become more aggravating and embarrassing from year to year.

The tendency of the taxpayer to protest to this or that action and to attempt to stampede the school authorities into departures and policies that ought not to obtain, has been growing rather than diminishing. It has not only confined itself to a taxpaying constituency, but has been extended even to those who are recipients of the educational blessings conferred by the schools. To see a body of pupils in an attitude of defiance to the school authorities is no longer a novelty in this country. Situations may arise where a fraction of the constituency may honestly differ with the school authorities, but the manner and means of expressing opposition and of reaching amicable conclusions are always at command. In staging a public protest the consequences should be thoroughly considered before engaged in. When men have once committed themselves publicly to an attitude, more particularly when that happens to be the wrong attitude, the way to a correct solution is not so easily reached.

Again, the adult disturber should remember that he will encourage youthful imitators. The taxpayer who stands out in open protest to the school authorities, must realize that the pupil in the schools is also subject to partisanship. The latter, through a mistaken notion as to his prerogatives, may engage in forms of protest, that violate all disciplinary order and precepts. School strikes are a disgrace to the pupils that engage in them, but also a reflection upon the parents that encourage them.

The schools are conducted for one specific end, and one only, namely, the moral, mental, and physical welfare of the child. That being true, it follows, too, that those who concern themselves in the school administrative affairs, should bear in mind this objective. To engage in loud and ill-mannered denunciation of the school authorities means to lessen the respect which the pupils should and must have for those who direct their schooling. The noise of the street is certain to enter the school premises. The denunciation by the parent is certain to reach the ear of the pupil.

The experiences of the recent past, with its restive and explosive demonstrations against the authority of the board of education, can only lead to the conclusion that the disciplinary prerogatives of that body must be exercised with unflinching directness. There must be an exercise of caution and care in reaching conclusions on administrative affairs which are eminently sound, and which cannot consistently be assailed by the taxpayer much less by a disgruntled body of children.

If the modern board of education is to fulfill the high mission that has been placed upon its shoulders it must stand clearly and unmistakably upon a platform of obedience, order and discipline which must be observed by every teacher and child in every schoolhouse under its jurisdiction.

WHEN SCHOOL-BOARD OPPOSITION TO SUPERINTENDENT IS UNWARRANTED

The hazy conditions which formerly surrounded the relative scope and function of the school superintendent and that of the board of education have with the passing of time been lifted into clear relief and understanding. Modern school administrative thought designates the one as the chief executive and the other as the policy-making body. Executive initiates, devises and recommends, the board of education accepts or rejects, and the former carries into realization that which has been accepted or decreed.

Thus far it would seem that where the relations are definitely expressed and properly observed, both amiable as well as effective cooperation would be the result. While in the main that is true, it also follows that violations are engaged in and that one or the other factor will enter upon encroachments of prerogative. The board member invades the province of the superintendent and the superintendent violates policies.

Where these violations are engaged in, friction is certain to follow. A minority element on the board begins to manifest itself either justly or unjustly, in suppressed or open opposition to the superintendent. The latter holds to his belief as to what policies he ought to defend and the board member opposes them. Where these differences are thrashed out with a spirit of fairness and a reasonable degree of intelligence, the solution is usually found. But, where the attitude of one or the other becomes resentful, a disagreeable situation follows. The real sufferer in such a situation is the superintendent. The board member is a voluntary public official who has nothing except his pride and prestige to subserve, while the other has a professional calling and a bread and butter existence to maintain.

A. M. Cannon, the school superintendent of Hood River, Oregon, who recently was prompted to resign, publicly said: "The position of superintendent of schools anywhere is hard enough when supported by a unanimous board; but it is very unpleasant and almost unendurable when opposed by two or more members. The effect of this opposition, however, does not stop with the superintendent but it permeates every school and every department, lowering the general morale of the whole system, and adding to the difficulties of maintaining desirable standards of discipline and scholarship.

"For some time past I have felt a lack of support on the part of some board members, and during the past year this has shown itself at times in open opposition to my policies of school administration. Not that I am always right in my policies; I am not; but when good policies of administration and teaching methods are attacked, it is my duty to defend them even though I incur the ill will of those who attack them."

This by no means proves that the superintendent was wholly right or the school board wholly wrong. It does prove, however, that a complete understanding was not reached and that open opposition to the superintendent has the tendency to impair the general discipline and efficiency of the system. The primary question here is: Who is entrusted with the formulation of policies, and who is delegated to execute them? This must, in the first instance, be clearly defined.

But, aside from striking a clear division of the function and prerogative of the one or the other, there remains the outstanding fact that a nagging opposition to the superintendent has its harmful effects upon the school system. If the superintendent is unfit, his removal must sooner or later be effected. The situation cannot be improved by an open threat to fire him, repeated daily and monthly long before his contract expires, and by continued publicity of some of his shortcomings. There is just one time and place for engaging in a justified dismissal.

During the incumbency of his office the superintendent is entitled to the friendly and helpful cooperation of the board of education. His efficiency may, in instances, be stimulated or marred, in proportion to the support he receives or the opposition he encounters. Surely, he is as human as the rest of mankind, and can render his best only when friendly rather than unfriendly eyes are upon him.

THE ITINERANT SCHOOL-SUPPLY PEDDLER

The season of the year is approaching when the college student employs the vacation months in turning an extra dollar. He may serve as a waiter or garage attendant at a summer resort, run a motorboat for guests about inland lakes, bang a piano or blow a saxophone for rural dances, drive a bus for tourists, or engage in any other honorable avocation. He may hike through rural districts vending school paraphernalia and supplies in order to earn that needed dollar.

All these occupations may be deemed laudable if honorably carried on. When it comes to peddling school supplies, more particularly in the rural districts, we are, however, reminded of some aggravating experiences. School trustees and small-town school-board members have been inveigled into buying school paraphernalia at exorbitant prices, or buying things for which the schools have no particular use.

The itinerant salesman who thus harvests questionable orders usually represents nobody but himself. He comes apparently from nowhere and when the summer season is over flits back to unknown regions. He gets the other man's name on the dotted line, and the order is discounted and placed in the town bank for collection. Payment cannot be avoided. The school director has been stung, and the useless apparatus and appliances go into the woodshed for storage. He begins to believe that the school-supply business is not all that it ought to be.

The picture here presented may seem somewhat overdrawn, but it really describes a situation which was quite common in former years throughout the country and which is enacted occasionally even to this day. The evil arises from the fact that the victim does not distinguish between a transient school-supply peddler and an accredited salesman who represents an established school-supply house. The one represents no one but himself, while the other is the representative of a reliable concern. The peddler accepts any price he can get, the more the merrier, while the responsible salesman has a fixed price, which is consistent with the value of the article.

There can be no objection to the teacher-salesman who during the vacation months is engaged in the sale of school supplies, provided he represents a reputable concern and holds to honorable dealings. There is objection, however, to the teacher-salesman who capitalizes his or her connection with a school district by selling to that district and pocketing the profit. When something goes wrong the seller can readily throw the blame elsewhere.

It stands to reason that when supplies are purchased from an established concern any errors or shortcomings that may arise are readily corrected. In fact, the distributor who has a reputation to maintain is anxious that every sale is satisfactory. His continuation in business depends upon expeditious and efficient service.

The abuses of the past have been largely allayed because the school-supply business has been stabilized and has in late years made substantial strides in the direction of economic distribution. Responsible distributors have established themselves in nearly all states and are rendering a valuable service to the school interests.

Utilitarian supplies and equipment are an essential to every schoolhouse. In the larger school system the business manager, secretary, or superintendent will negotiate for them. His budget records will guide him in the selection of things he wants and his knowledge of the school-supply field tell him when and from whom to buy. In the rural districts the purchase of supplies may fall upon the school director who may also serve as chairman or secretary, or who happens to live nearest the schoolhouse. He may know how to bargain for the season's fuel, pupil transportation, or needed repairs, but find himself incapable of dealing with the matter of textbooks and supplies. But, if that task is thrust upon him he must discriminate, as already pointed out, between the irresponsible peddler and the accredited salesman of a responsible school-supply distributor.

The emissaries sent out by these distributors know the school-supply needs of the day. They are not inclined to overstock the store of supplies, or to exact a price that is unreasonable. They are engaged in the school-supply business as a permanent occupation and expect to deal with school authorities so efficiently and so serviceably as to merit continuous patronage. That spells good business. A bargain is never a good bargain unless it has been fair and equitable to both the buyer and the seller.

A COMPLIMENT IN RHYME

A writer in the *Educational Review* rambles along in poetic fancy and subjects his observations to the rules of rhyme under the nom de plume of T. William Rockinghorse. He tells of superintendents and school boards, and other interesting objects and institutions. In the April number we find the following.

Clan Bruce

And, gentles, now I introduce
Some people of the greatest use
To civilization, education;
The Milwaukee family of Bruce.
Their high-grade School-Board magazine
Is of school papers a real queen;
To boards it makes clear what school-
men hold dear.
Hail thou peace-making go-between.

The Wise Purchasing Agent.

The Issue of School Bonds in Ohio

H. E. Ryder, County Superintendent, Geauga County, Ohio

This discussion of school bonds as related to the school laws of Ohio will take up the steps to be followed by a board of education in issuing school bonds and will attempt to point out some of the difficulties to be encountered as well as some general suggestions for avoiding difficulties.

A great deal of publicity activity may well be carried on about the time that the board takes its initial steps in formulating the legislation for the bond issue. The authority calling an election is lodged in the hands of the local board of education and a majority may by resolution passed at a regular session decide to call an election. A recent session of the legislature so modified the laws that even bonds made necessary by condemnation order must now be voted at a regular election. The only provisions under which bonds may be voted at a special election are for the purpose of completing partially completed buildings or for the purpose of rebuilding structures damaged or destroyed by fire or other public calamity.

But whatever the purpose for which bonds are to be voted it is extremely to the advantage for all boards to consult the prosecuting attorney in regard to the formulation of every resolution and regarding every slip of procedure. The value of this procedure is found when the bonds are placed on the market for sale. Any little technical error in legislation, which appears in the transcript, may invalidate the issue. Some of the minor difficulties may be adjusted after sale, but the only safe policy for a board of education to follow is to be certain that every step taken is regular and legal in all respects. Should the prosecutor, who is the free legal adviser of all boards of education, refuse to act, a board of education may then employ any reputable attorney and it is advised that only those who have had successful experience along this line be employed. The advantage of sound legal advice is noticed even in relation to the first resolution for upon the validity of this resolution rests the other resolutions that are formulated afterward.

After being assured of the legality of the initial steps in the bond issue, the board of education should proceed with publicity activity. I believe it the duty of every board of education and every superintendent to see that the public is completely and honestly informed upon every phase of the problem. It is a principle of democracy and it is the plan of justice that the public be taken entirely into the confidence of those in charge of the campaign.

But as it is not the province of this discussion to take up the discussion of publicity programs and policies, we shall pass on to the next item. The clerk must be instructed in the initial motion to notify the deputy supervisor of elections of the action of the board. It is necessary that he submit to the supervisor a copy of the resolution which authorizes the call of election and request that the ballots be prepared. This request and a copy of the resolution must be in the hands of the proper officer forty days previous to the election in order to take care of the absent voter's law. The clerk will then see that notices are posted in five conspicuous places in the district or published in a paper of general circulation in the district at least forty days previous to the election. The form of notice and instruction for publication or posting should be incorporated in the original resolution. The clerk should preserve a copy of such notice if posted and be prepared to give oath to the fact that they have been posted on the date prescribed. Should they have been published instead of posted, the clerk must secure an affidavit from the publisher, giving a copy of the notice as published and stating that such notice has been published in said publication the required number of issues. This is an essential part of the transcript.

The campaign and election itself though interesting are not vitally related to this discussion because the election is not conducted under the direction of the board of education. However, it might be well for the board to make provision for a challenger to guard against any attempt at illegal voting. It should be definitely understood that it is illegal for any individual to solicit and transport voters to the polls, the object being to carry or defeat the issue.

The next duty devolving directly upon the board of education is the canvass of the poll books. It is well for the board to observe this date, though the attorney general has held that, if a quorum should not appear on this date or for any other cause the board should not meet on this date, they may canvass the vote at a special or a later regular meeting. However, it is best for the board to follow the law strictly at every step. The minutes must show that the poll books have been canvassed and record made of the number voting for and against the issue.

Following this the board, if authorized by a majority vote of the electors, proceeds to pass a resolution authorizing the issue. This resolution must designate the amounts and purposes for which the money will be appropriated and the term over which the bonds are to run. It must also make provision for proper serial arrangement and coupon attachment. Just here comes the serious problem of determining the proper time for retirement of the bonds so that the community may be burdened no longer than necessary and that the weight be as little felt and as evenly distributed as possible.

The board is obliged to offer the bond issue first to the local sinking-fund commission, and if the commission has no funds, the issue was formerly required to be offered to the state industrial commission. This was a wise provision of the statute which would direct dormant funds of the district or of the state into an investment that would be of advantage to both parties concerned. Just recently, however, the state supreme court decided to require the industrial commission to bid on the issues as any bidder is required. However, the board of education may elect to reject any or all bids and then sell at private sale. As the situation now stands the state sinking-fund commission and the industrial commission must bid on the local market as the commercial bidder.

The resolution for issue must be very carefully worked out and the notice for advertising must also be incorporated in this resolution. This notice for the sale of bonds must be advertised in a paper of general circulation for a period of three weeks. In this connection it is rather interesting to note that the wider the publicity which can be given the greater the number of bidders and probably the better the offers which will be received. It is rather interesting to study the bond market and note the advantageous times at which bonds are sold. With the change of law which dispensed with special elections, the chances are that shortly after the primary election or the regular election a very large number of bonds may be thrown on the market for sale. As a result the premium will probably be lower than at other times. Common practice requires a deposit in the form of a certified check to be made with each bid. Having properly advertised, it is to be supposed that the sale will be made to the highest bidder. Just here, however, comes a real problem for, the purchaser, be it the sinking-fund commission, the industrial commission, or some brokerage firm, will demand a transcript.

The transcript must recount every step of the procedure. A Columbus firm has a form of blank transcript for each section authorizing the sale of bonds. This permits of little possibility of error. The transcript is required to insure the purchaser that the proceedings are regular and legal and it safeguards the purchaser. The sections of the transcript which are regarded as essential may be worthy of consideration just here. All the sections of law authorizing the issue of school bonds in 7625-7630 and section 7630-1 are common in the following requirement for transcripts:

(1) A certificate of membership of the board of education. This is made by the clerk in which he recounts the organization of the board, its membership and the section of the minutes which prescribes the date of meeting for the year when the legislation is started and perfected. This involves section 8559 of the General Code of Ohio.

(2) A copy of the resolution authorizing the issue. This must state that the ordinary sources of revenue have been exhausted, that the necessity has arisen, and that as a result the board submits the question to the electors. The reasons may vary slightly with the section under which the action is taken, but in all cases the section must be cited and the purpose for which the money is to be used must be stated.

(3) A copy of the notice which has been posted or published for the election must be given. If published an affidavit must accompany it, showing date of publications. If it has been posted, the clerk must take an oath to the fact that he has posted it in the required number of places in the district. This is authorized by section 8569.

(4) The clerk must certify as to the form of ballot used, a copy of which should be included, as authorized by section 8569.

(5) A copy of the minutes showing the canvass of the poll books, indicating the number of votes cast for and against the question. Sections 8570-5120.

(6) A copy of the resolution requesting the clerk to certify the estimated life of the proposed improvement and the maximum maturity of the bonds. Sections 2295 7-9-10.

(7) A certificate of the clerk, showing the estimated life of the proposed improvement and the maximum maturity of the bonds. Section 2295-7-9-10.

(8) A resolution to issue bonds after the authorization of the electors. This must authorize the clerk first to offer the bonds to the sinking-fund commission, next to the state industrial commission, and last to the public at large. Section 5649-1b.

(9) A certificate showing that a copy of the bond resolution has been filed with the county auditor. Section 5649-1b.

(10) A copy of the resolution of the sinking-fund commission, showing the purchase or rejection of the issue. Section 7619. In case there is no resolution of the sinking-fund commission, the statement is usually signed by the board of education.

(11) The financial statement of the board of education, showing the amount of outstanding bonds, the rate of tax levy, the amount of this issue of bonds, etc. Sections 2295-3-4.

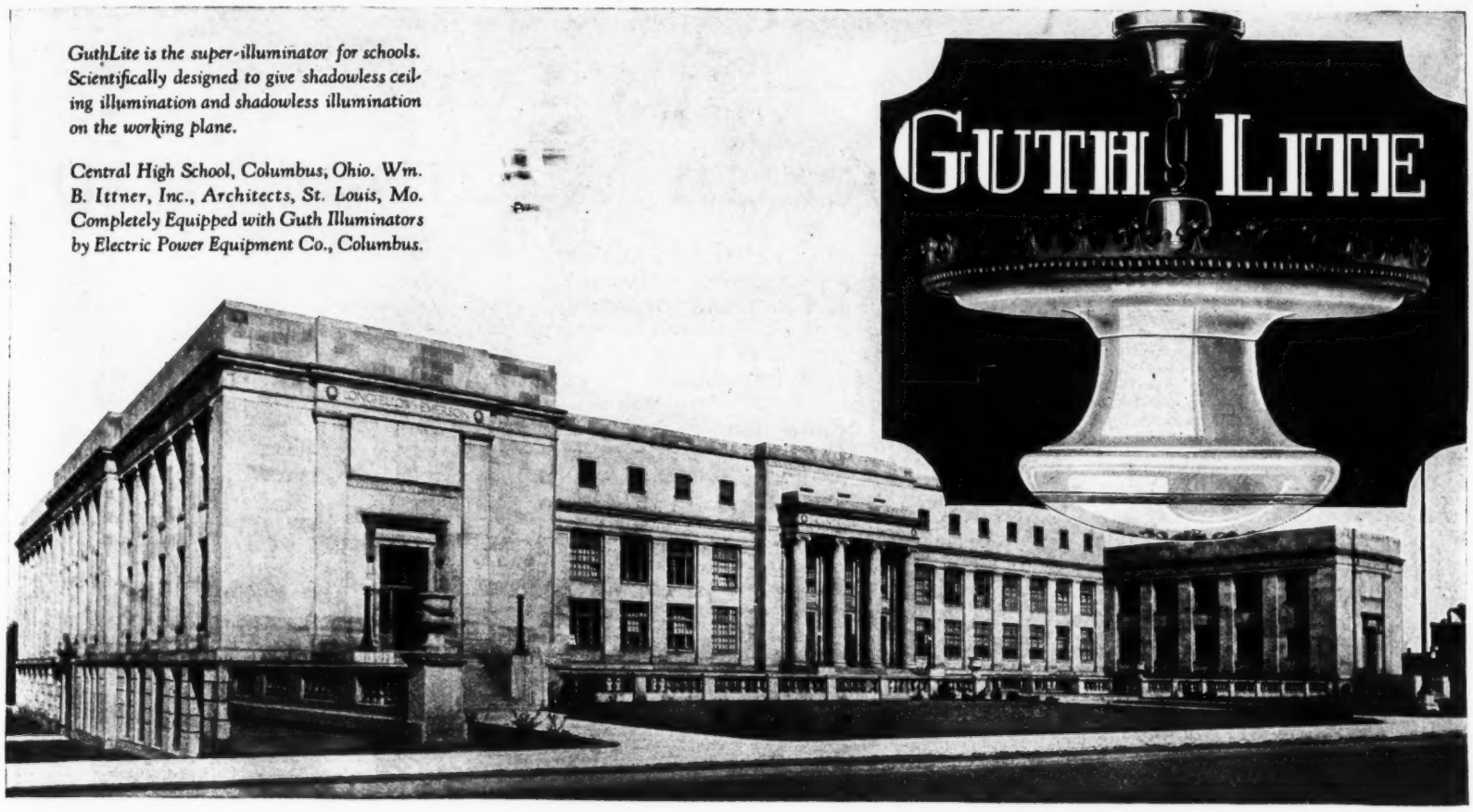
(12) A sworn statement from the clerk that the foregoing statements are correct and that the resolutions and copies are true and correct copies. Section 2295-3-4.

(13) A certificate of the prosecuting attorney, stating that he has examined the transcript, that he believes it to be regular and legal in all respects.

(14) A legislation certificate signed by the cashier of the local bank, stating that the signatures are true and authentic, etc.

It is a very good idea for the board to arrange with the bank selected as its depository to give the greatest possible interest for dormant funds, for there will be a time when a large part of the funds resulting will be dormant.

It might be well to close this discussion as we started it by cautioning boards of education to secure expert counsel for every step of their procedure. They should be advised to advertise widely and throw the bonds on the market at the most advantageous time possible.



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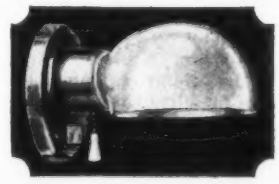


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SCHOOL LAW

School District Property

The board of education may contract for the repair of a school building without an election. (Illinois school law, § 189, as amended 1919.)—Llewellyn v. Board of Education of Cicero-Stickney High School Tp. Dist., 154 Northeastern Reporter 889, 324, Ill. 254.

The board of education may contract for repairs to a school building, though not completed within a year.—Llewellyn v. Board of Education of Cicero-Stickney High School Tp. Dist., 154 Northeastern Reporter 889, 324 Ill. 254.

Materialmen and subcontractors may recover against surety on a bond for the construction of a school building, though they were not mentioned in the bond. (General code, § 2365-1 et seq.)—Southern Surety Co. v. Chambers, 154 Northeastern Reporter 786, Ohio.

The parties to a contractor's bond required by statute are chargeable with notice of statutory provisions. (Ohio general code, § 2365-1 et seq.)—Southern Surety Co. v. Chambers, 154 Northeastern Reporter 786, Ohio.

School boards are state agencies, and not liable for negligence of employees, even though empowered to provide transportation for pupils. (Louisiana act No. 100 of 1922.)—Horton v. Bienville Parish School Board, 4 La. App. 123, La.

A suit for tort of employee, for which the school board was not liable, will be dismissed on exception of no cause of action.—Horton v. Bienville Parish School Board, 4 La. App. 123, La.

School District Taxation

After money from a bond issue is paid into the proper depository, a taxpayer or patron of a school having only general public interest may not enjoin public officers from disbursing it until he applies without success to the proper public authority for relief. (Hemingway's code, § 3683.)—McKee v. Hogan, 110 Southern Reporter, 775, Miss.

A bill by a taxpayer or patron of a school, having only general public interest, to enjoin public officers from dealing with the proceeds of a bond issue, must be on behalf of the public and invite other taxpayers to join. (Heminway's code, § 3683.)—McKee v. Hogan, 110 Southern Reporter, 775, Miss.

A bill by a taxpayer or patron of a school, having only general public interest, to enjoin public officers from dealing with the proceeds of a bond issue, must allege suit is brought on behalf of the general public and failure to secure action by public officers. (Heminway's code, § 3683.)—McKee v. Hogan, 110 Southern Reporter, 775, Miss.

Teachers

The statute contemplates the employment of teachers for a school year of at least eight months, though trustees may limit the tenure to shorter term. (Arizona civil code of 1913, par. 2733, subd. 8, amended by the laws of 1925, c. 11.)—Public School Dist. No. 11 of Maricopa county v. Tolson, 252 Pacific Reporter, 509, Ariz.

The power to employ generally implies power to dismiss teachers, in the absence of express or implied statutory provisions to the contrary. (Arizona civil code of 1913, par. 2733, subd. 8, amended by the laws of 1925, c. 11.)—Public School Dist. No. 11 of Maricopa county v. Holson, 252 Pacific Reporter, 509, Ariz.

The statutory terms as to the dismissal of teachers cannot be supervened by the trustees. (Arizona civil code of 1913, par. 2806.)—Public School Dist. No. 11 of Maricopa county v. Holson, 252 Pacific Reporter, 509, Ariz.

The legislature in naming grounds for dismissing teachers must be presumed to have intended to prohibit arbitrary or capricious dismissal. (Arizona civil code of 1913, par. 2697, subd. 9, amended by the laws of 1925, c. 69, par. 2806.)—Public School Dist. No. 11 of Maricopa county v. Holson, 252 Pacific Reporter, 509, Ariz.

A contract provision, authorizing the dismissal of a teacher without an opportunity for a hearing or proof of unfitness or incompetency, is held invalid. (Arizona civil code of 1913, par. 2733, subd. 8, amended by the laws of 1925, c. 11, and par. 2806.)—Public School Dist. No. 11 of Maricopa county v. Holson, 252 Pacific Reporter, 509, Ariz.

Pupils

Excusing children a half hour weekly to attend religious instruction is held not to violate the compulsory attendance law; "irregular attendance." (Education law, § 621.)—People ex rel. Lewis v. Graves, 219 N. Y. S. 189, affirming order (Sup.) 215 N. Y. S. 632, 127 Misc. Reporter, 135, N. Y.

A law forbidding the teaching of evolution in public schools is held not to violate a constitutional provision forbidding preference to religious establishment or mode of worship. (Tennessee acts of 1925, c. 27; Tennessee constitution, art. 1, § 3.)—Scopes v. State, 289, Southwestern Reporter, 363, Tenn.

LAW AND LEGISLATION

—The community districting bill presented by the Missouri State Teachers' Association was rejected by the legislature. Charles A. Lee, state superintendent, reprimanded the legislature for its action. He said: "By permitting this bill to die on the calendar the senate said in unmistakable terms that it was not in favor of providing better educational facilities for the boys and girls living on the farms; that it was not in favor of correcting the present inequalities in educational opportunities, whereby many children are permitted to attend school for only a three or four months' term; that it was not in favor of correcting the present inequality regarding the financing of public education, whereby the farmers in one district in a county have to pay from fifteen to twenty times as much school tax to support their school as do the farmers in another district in the same county."

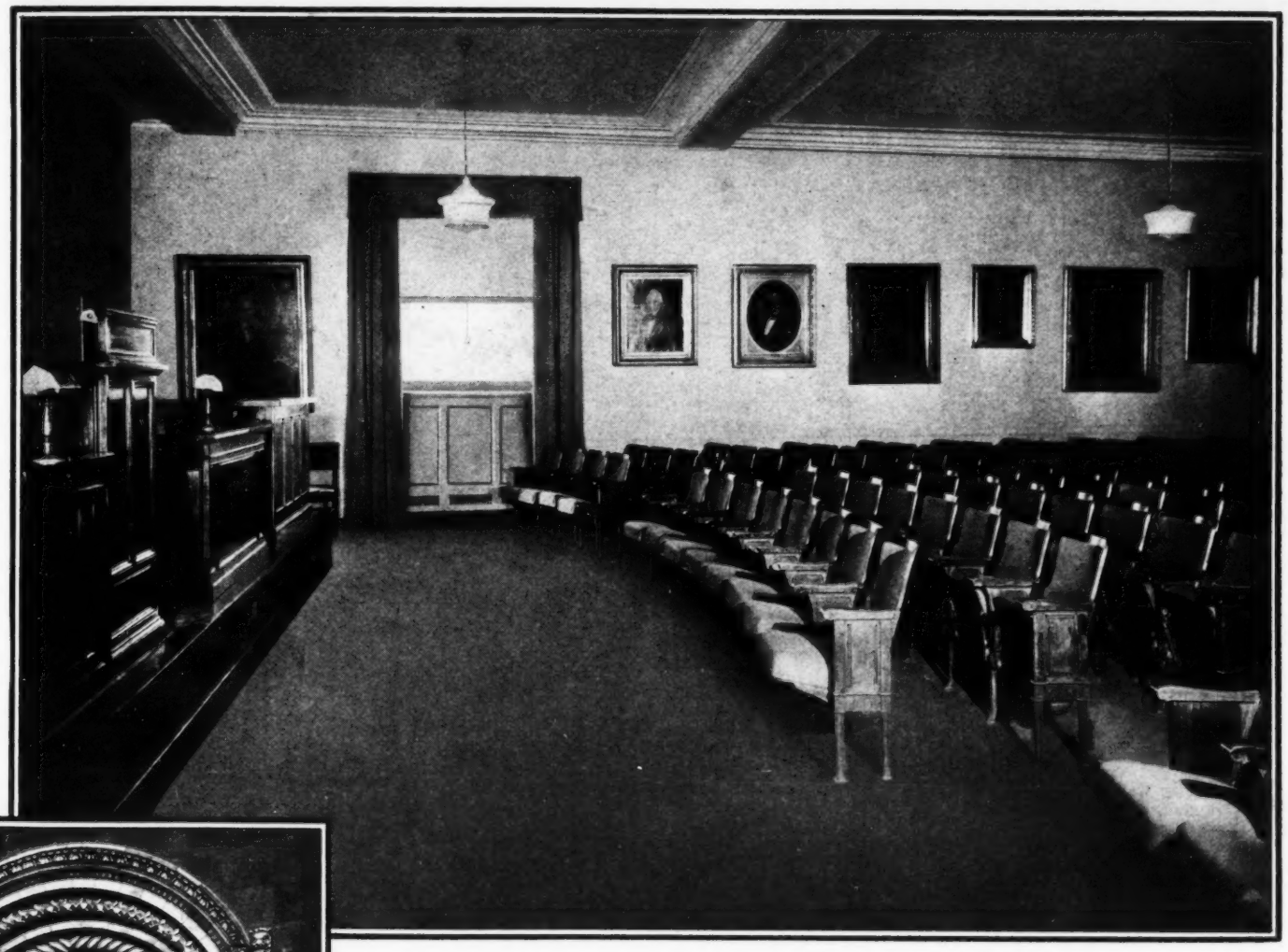
—Owing to failure to organize early in April of this year, the board of education of North Arlington, N. J., was in error and virtually without legal standing, according to an opinion rendered by B. C. Wooster, county superintendent.

—The Wisconsin Department of Public Instruction has ruled that no school district or municipality may legally issue bonds creating an indebtedness of more than 5 per cent, the constitutional limit. Children between 7 and 14 years of age, who have not completed the eighth grade and who live within two miles of a school, come within the provisions of the compulsory attendance law.

The department has also ruled that a man who is a telegraph operator is not ineligible to membership on the board because of his employment. A rural-mail carrier may not suffer the loss of his position because of government employment.

—On January 1, 1920, the New York City board of education increased the salaries of three assistant superintendents from $6,500 to $7,000, $6,000 to $7,000, and $5,000 to $6,000, respectively. The city comptroller, however, refused to recognize the increases. The supreme court now has decided in favor of the superintendents.

(Concluded on Page 74)



BONDED FLOORS of brown *Gold Seal* Battleship Linoleum have been installed in the palatial new Fifth Avenue home of the New York Academy of Medicine, Fifth Avenue at 103rd street, New York.

Architects: York and Sawyer; *General Contractors:* Marc Eidlitz & Son.

In the New York Academy of Medicine

WALK through the beautiful Romanesque doorway of the New York Academy of Medicine and down the corridors into one of the peaceful lecture rooms. Once again—as in so many modern schools, university buildings and those of other educational institutions—you are walking on BONDED FLOORS of *Gold Seal* Battleship Linoleum.

In the illustration above note that the chairs are fastened permanently to the floor—screwed down right through the Battleship Linoleum. Note further the attractive simplicity of the floor. Its restfulness is reflected in its looks—for all BONDED FLOORS, thanks to resilient cork-composition construction are quiet and comfortable underfoot.

Our many years of experience in installing resilient floors can be of value to you. For information please write Dept. S.

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Gold Seal Battleship Linoleum
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(Concluded from Page 72)

—A bill has been introduced in the Wisconsin legislature barring all married-women teachers from the schools. The bill is not likely to pass.

—The Wisconsin state department of public instruction has rendered an opinion to the effect that "school officers cannot legally enter into a contract for services to be rendered or material to be furnished unless there are funds enough or material available or definitely provided for to meet the cost. What is sometimes termed an 'anticipatory' contract is illegal. No school board has authority to purchase maps, charts, etc., etc., and attempt to make payment with a school order which can only be satisfied by a tax to be levied and collected in the future. School furnishing houses should not forget that that is the law in this state."

—A suit has been entered against the board of education of Richland County, Ohio, by parents who claim that the law provides transportation to and from school for their children. They have transported their children and have filed claims at the rate of $1 a day for 272 days with interest.

—Ouster proceedings were entered in courts at Jackson, Tennessee, against Robert C. Mayo, chairman of the Madison County board of education. The complaint urges "mismanagement and misappropriation of funds."

—The state board of education of Kansas is made up of the state superintendent, five institutional heads, and two county or city superintendents. A bill before the legislature provides for a board that shall consist of the state superintendent, one city superintendent, one county superintendent, and two other persons, the last four to be appointed by the governor.

EQUALIZATION IN NORTH CAROLINA

—The North Carolina legislature of 1927 has increased the amount of the equalization fund for schools from $1,500,000 to $3,250,000, which is more than double the amount provided in 1925. This amount is of sufficient size to make itself really felt in a number of counties. The law has three outstanding features which are worthy of notice.

1. *The method of determining values.* No state has yet been able to find a method for the distribution of state aid on a large scale without using the taxable property in a county or district as a measure of the economic strength of that county or district in determining its ability to support a minimum educational program. The present values of taxable wealth as among the several counties of the state are no longer accepted as being fair and equitable. On the other hand, it is necessary if this fund is to be equitably distributed, to have determined by some impartial agency the relative worth of the various counties as among themselves for the purpose of the distribution of this fund. The new equalization law sets up a commission and clothes it with power to find out and to determine the worth of each county in such a way that this value will be equitable among the counties. Both Pennsylvania and New York at the general assemblies of 1927 adopted this principle as the basis of distribution of state funds. Of course, there is some danger of misunderstanding as there will be two values in many counties, one the values fixed by the commissioners upon which taxes will be levied and collected, and another the values fixed by the state board of equalization for the purpose of distribution of the equalizing fund. The advantage, on the other hand, of this scheme is that the state board of equalization is on duty all the time and can from year to year make adjustments in valuations to the end that every county will receive its just proportion of the equalizing fund provided by the state.

2. *The equalizing fund now includes a part of the operating expenses of the school.* Heretofore, the equalizing fund has been limited to teachers' salaries only. In a modern school system a great deal of expense must be incurred in addition to teachers' salaries. When the equalizing fund was started twenty-five years ago the salary of the teacher was practically the entire expense. The operating expenses of a school in the various counties now range from one per cent of the teachers' salaries to more than 50 per cent. If the tax rate in the various counties for the six months school term is to be kept anything like on a level it will be necessary for the state to participate further in these operating expenses than it has so far. However, a beginning has been made in this direction which if followed up will give considerable relief to many counties, and will encourage the counties to set up for themselves a better system of schools.

3. *Local initiative.* The counties are left in control of their own fiscal affairs. This makes it possible for the people within a county to determine for themselves in a large measure the kind of school opportunity they desire to provide for the children of the county. In this way public education in North Carolina has developed. It provides an environment in which healthy development can take place.

EDUCATION AND INSTRUCTION

Education and instruction have exactly opposite meanings. True education is self-discovery, the flowering of our possibilities; true instruction is a mere accumulation, a building up of fact upon fact, skill upon skill, like bricks in a wall. American schools are achieving instruction in the form of a perfectly standardized product. As yet we are but dimly aware of education as the freeing of individual potentialities.—Burton P. Fowler, Headmaster, Wilmington, Del.

ASSOCIATION ELECTIONS

—Miss Janet C. Simpson of the Florence Normal School was elected president of the Alabama Educational Association. Other officers are: E. P. Murphy of Gadsden, retiring president, first vice-president; J. B. Wilson of Hamilton, second vice-president; Miss Catherine Borden of Troy Normal School, third vice-president; C. C. Smith of Chatom, and Paul M. Munro of Selma, members of the executive board, to serve three-year terms.

—H. E. Wrinkle, superintendent of Healdton, was elected president of the Red River Valley conference of Oklahoma. Key Wolfe, superintendent of the Davis schools, was chosen vice-president; H. W. Cooley, Dundee schools, secretary-treasurer.

—The Inland Empire Education Association has elected the following officers: President, M. J. Elrod, University of Montana; vice-president, W. S. Stephenson, superintendent, Payette, Idaho; treasurer, L. D. Baker, superintendent, Davenport; secretary, James A. Burke, principal, Spokane; directors, H. E. Inlow, Pendleton, Oregon; C. D. Brock, Wallace, Idaho.

—R. L. Scott of Carrollton was elected president of the Southwestern Division of the Illinois State Teachers' Association. Miss Tillie Reither was elected secretary for a thirteenth consecutive term.

—D. H. Thompson, assistant superintendent of the Longview, Washington, schools, was elected president of the Washington High School Principals' Association. Principal Lloyd Turner of Chehalis was elected secretary.

SCHOOL FINANCE AND TAXATION

THE ST. PAUL SCHOOL FINANCE SITUATION

The original charter of St. Paul, Minn., limited the school expenditures to $6. In 1919 the total cost of city government was fixed at $30 per capita out of which the schools received $12. A survey of the school finances of St. Paul, made by J. W. Smith, the educational statistician, under the direction of J. R. S. Ferguson, commissioner of education, brings out the following statement:

"In 1921 the total school expenditures raised by municipal taxes amounted to $2,424,477.16, which, based on the population of 236,698—gives $10.24 per capita. In 1922, the per capita tax expenditures amounted to $10.86—in 1923 it amounted to $11.01—in 1924 to $11.40 and 1925 to $11.46. The charter amendments of 1919 and 1923, while removing the former limitation of $6 on the department of education, merely raised the general tax quota from $24 to $30 per capita, with the tacit understanding that the extra $6 should be allowed to the schools. It has been apparent, however, for some time that the total tax quota of $30 per capita is inadequate for efficiently conducting the city's business. This is true, especially of the department of education. Out of the $30 the schools can not reasonably expect a larger allowance than the $12. While we admit that $18 is insufficient for the proper administration of the other municipal departments, it must be admitted even more positively that the department of education cannot function properly with the present $12 allowance. It is my purpose, in this study, to show by comparative data that this amount is totally inadequate and that some relief must be afforded in the near future if the department is to continue all its activities."

In 1896 the St. Paul school system had an enrollment of 22,392, with 557 teachers. In 1926 this was increased to 40,957 with 1,411 teachers. The total current expenses increased from $2,391,999 in 1921 to $3,136,732 in 1926, or 37 per cent.

TAXATION IN SUPPORT OF SCHOOLS

"The states are employing to a considerable extent corporation taxes, income taxes, and other types of taxes instead of, or in addition to general property taxes as a means of producing state school revenues. A recent government report discusses the subject as follows:

"For example, schools in New Hampshire, Maine, New Jersey, Virginia, California, Delaware, and Wisconsin are supported in part by one or more of the following: Corporation tax, bank tax, railroad tax, public service and insurance companies tax. Income taxes are used for schools in Massachusetts, North Carolina, Arkansas, and Delaware; inheritance tax in California, Virginia, Louisiana, Michigan, and Kentucky; severance tax in Louisiana and Arkansas. State income taxes for schools are considered an excellent source of funds. The use of this source has not extended so rapidly as its advocates hoped, owing to the creation of the federal income tax.

"The severance tax is a tax levied on all natural products severed from the soil except agricultural. It is believed by many students of taxation that when minerals, timber, clay, and other natural products are removed the state is permanently impoverished, and that those profiting by it should pay tribute which can properly be spent on the education of future citizens of the state. Severance tax and state income tax are steadily growing in popular esteem as sources of moneys for school support.

"It has been emphasized also by students of taxation that whenever possible the state should draw its revenues from sources other than those taxed by its constituent public corporations. This principle has been definitely and practically recognized in at least two states, Massachusetts and California. Whenever new types of state taxation are proposed it is necessary to emphasize the fact that the reason for introducing such taxes is to reduce the general property tax, both state and local, as far as possible. New sources of income should not be an added burden, but should tend toward a better distribution of tax burdens."

FINANCE AND TAXATION

—The Daviess county, Kentucky, school board lost its case in the court in its effort to obtain a sixty-cent tax levy in place of the former levy of fifty cents. The court, in its decision, held that the constitutionality of the law placing the limit for school levies at fifty cents is clearly indicated in the title and in the bill revenue is merely an incident.

—Jefferson City, Mo. The voters have approved a school levy of $1.20. The levy failed to be approved in four districts.

—The school board of Oklahoma City, Okla., has adopted a budget of $1,983,657 for 1927.

—Albuquerque, N. Mex. The school board has adopted a budget of $451,415 for the next school year. The budget represents an increase of five per cent over the last year.

—The school district of Laurel, Mont., has reduced its bonded indebtedness by $20,000 in the last three-year period. The school district improved its finances by $7,624 through a reduction of the floating debt of registered warrants, besides retiring $9,000 in bonds. In the last three years between $3,000 and $5,000 have been applied to the floating debt of $15,000, which was entirely eliminated, enabling the board to operate on a cash basis. Three years ago the board had a bonded indebtedness of $95,000 but this has been reduced to $77,000 with nearly $20,000 in bonding rights.

—Tonganoxie, Kans. The county commissioners have been authorized to make a levy in excess of six and three-fourths mills and not exceeding twelve mills for school purposes. The budget for the school term has been fixed at $10,600.

—Enid, Okla. The school board has asked the voters to approve a ten-mill levy for school purposes for the year 1927-1928. The extra levy will provide fifteen mills for school purposes.

—St. Joseph, Mo. The school district will receive approximately $60,000 more revenue this year than it did in 1926-27. With this added revenue, it will be unnecessary for the district to make any reductions in teachers' salaries.

—Sapulpa, Okla. The board of education has asked for a ten-mill tax for the operation of the schools next year.

—Oklahoma City, Okla. The present bonded debt of the school district is $5,136,000. The annual interest payments on outstanding bonds amounts to $253,605. A total of $207,323 must be raised by tax levy every year to be placed in the sinking fund which is used to retire the bonds at maturity.

—St. Louis, Mo. The estimated revenues of the schools for the next year amount to $10,656,000, while the budget calls for an expenditure of $12,734,000. The board has a balance of $4,000,000 on hand.

(Continued on Page 79)

(Continued from Page 76)

—Walla Walla, Wash. The board has adopted a budget of $334,440 for the next school year.

—Colorado Springs, Colo. The school board has paid off $20,000 in school bonds.

—Erie, Pa. The school board has made considerable reductions in the budget for 1927. A total of $56,959 has been deducted from the requisitions, leaving a balance of about $274,000 which will probably be further reduced.

—The mayor of Boston has asked that the school board cooperate with the city authorities in reducing the year's tax rate and that it leave unappropriated at least $500,000 of the $739,000 surplus of last year. The possible appropriations of the school board for the year 1927 are: school taxes, $15,207,135; estimated revenue (1926 income), $600,000; cash surplus, $739,519. The total amount of the appropriations is $16,546,655. The sum of $11,000,000 is required for teachers' salaries.

—Ardmore, Okla. The board of education has approved a budget for the school year 1927-28, amounting to $213,970.

—Bowling Green, Ky. The school board has asked for a levy of $1.10. The increase of twenty cents over the old levy is for the purpose of erecting a new school. The new building will be modern and will cost about $70,000.

—The increased school costs are defended by the United States Bureau of Education. A recent report says: "The total expenditure for public schools in the United States, except debt service, for the year 1913, was $52,000,000, and for 1924 $1,821,000,000," and then translates the two sums into terms of the changed purchasing power of the dollar, showing that "while the $52,000,000 spent in 1913 remains the same, the $1,821,000,000 spent in 1924 is actually about $1,056,000,000. Judgment cannot be passed," says the report, "on the necessity of school expenditures and their increase year by year except in the light of comparison with other factors conditioning the cost, including, of course, the different purchasing power of the dollar in the respective years considered. Information collected in the United States Bureau of Education comparing annual expenditures in the years 1913, 1918, 1920, 1922, and 1924, with the purchasing power of the dollar in these years indicates that school costs have not increased to the degree many persons thought; nor to the extent that figures showing actual expenditures alone, unmodified by consideration of the decreased purchasing power of the dollar and by the increase in school attendance, would indicate. The relationship between expenditures for maintenance and purchasing power in 1913 dollars for the three annual periods 1913, 1919, and 1925 for one state are shown. This is reasonably typical of the relation between actual expenditures and purchasing power measured by the 1913 dollar in other states."

—A bill to place a tax on tobacco in aid of the Texas school of mines was killed by the Texas legislature.

—August Schabel moved at a meeting of the New Orleans, La., board of education that the surplus in the school budget up to $150,000 be used to pay back salaries to teachers for 1924-25-26. President Frederick J. Zengel, Jr., opposed the motion, holding that the amount should go into the building fund which had been deprived of $352,596. The motion of Mr. Schabel was adopted by a vote of four to one, Harry Goodman, Philip S. Ricks, August Schabel, and H. C. Schaumberg voting for it.

—Minneapolis, Minn. Supt. W. F. Webster has presented a budget of $7,765,799 for the year 1927-28. Alternate budgets on the promotion of the health department were submitted, one eliminating the dental hygienists' salaries, which total $6,318. Although the reparative dental work is to be eliminated this year it is proposed to continue the educational work as in the past.

—The board of education of Grand Rapids, Mich., has negotiated a loan of $400,000 at 4 per cent pending a sale of bonds by the city.

—"The schools of Pennsylvania cost the state and local communities $185,000,000 a year. School indebtedness amounts to $208,000,000 and $484,000,000 is invested in the school plant. There are 56,000 employees and 2,525 boards of school directors. In 1920 the schools got $11,000,000 from the state and in 1926 $22,000,000. Even at this rate, Pennsylvania is not 'keeping up with the 'Joneses.'" So reports H. E. Gayman, director of research and statistics for the Pennsylvania state department. "In one county the school costs $97.93 per pupil; in another county $38.73 per pupil. One county has $9,333 worth of property per pupil enrolled in the schools, and another $778 per pupil. One school district has $246,000 worth of property for each teacher employed, and one district has only $11,000. Unequal assessments make one person pay nine times as much tax in proportion to his property as another in the same district. Lower assessed valuation usually means lower expenditure for county purposes, although it also represents a higher rate of school tax. The greatest need in Pennsylvania is revision of the entire tax system."

—Rye, N. Y. At the annual meeting held on May 3, Mrs. Daniel O'Day was elected to succeed herself as a member of the board for another term of three years. Mr. William Billington declined reelection, and his place has been filled by Mr. J. Edward Odell.

—Tecumseh, Okla. The schools of Pottawatomie county have voted for an eight-month school term and for a fifteen-mill tax levy.

—Oklahoma City, Okla. The citizens have approved a levy of 14.9 mills by a vote of 35 to 1.

—The voters at Enid, Okla., have approved a special ten-mill levy to be used for the support and maintenance of the school system.

—Boston, Mass. All hope which city officials had of applying the $700,000 school-department surplus to the reduction of the tax rate has been abandoned. The school board has intimated that it will refuse the request of the mayor, the vote having been unanimous at the meeting of the board.

—Governor Robinson of Delaware has signed a bill appropriating $2,000,000 for school buildings.

—The North Carolina legislature of 1927 has provided a fourth special building fund of $2,500,000 to be used as other funds have been used. Prior to 1927, the legislature appropriated fifteen million dollars as special building funds to be loaned to the counties for the purpose of erecting a more permanent type of rural-school building.

The first four installments from the third building fund may be re-loaned, thus making $1,000,000 available from this source. Within the next biennum there will be available approximately $3,500,000 for this purpose. Approximately 2,000 new classrooms were provided from the third building fund which provided accommodations for 75,000 children.

WHY SCHOOL COSTS ARE RISING

The following factors are held by the United States Bureau of Education as being responsible for the increased cost of education: "(1) the decrease in the purchasing power of the dollar; (2) the great increase in school enrollment and attendance

and consequent increase in number of teachers and equipment necessitated thereby; (3) the large proportionate increase in attendance in secondary schools, the per capita cost of maintaining which is approximately double that of maintaining elementary schools; (4) the provision of better facilities, particularly those which satisfy the needs of a broader curriculum involving additional special subjects and teachers; and (5) the need for a large school-building program because of the practical stagnation of building and improvement during the war period."

The bureau notes the cost of education per pupil attending as follows:

Continental United States, $95.16.

Alabama, $34.40; Arizona, $145.24; Arkansas, $26.02; California, $175.94; Colorado, $127.94.

Connecticut, $105.14; Delaware, $100.21; District of Columbia, $112.01; Florida, $62.79; Georgia, $31.70.

Idaho, $101.04; Illinois, $105.88; Indiana, $92.47; Iowa, $107.24; Kansas, $96.99.

Kentucky, $41.47; Louisiana, $64.83; Maine, $77.99; Maryland, $100.56; Massachusetts, $115.69.

Michigan, $127.38; Minnesota, $128.86; Mississippi, $25.30; Missouri, $79.36; Montana, $111.57.

Nebraska, $101.58; Nevada, $170.94; New Hampshire, $97.25; New Jersey, $141.78; New Mexico, $73.81.

New York, $151.21; North Carolina, $54.22; North Dakota, $115.81; Ohio, $122.38; Oklahoma, $74.03.

Oregon, $109.92; Pennsylvania, $100.22; Rhode Island, $96.40; South Carolina, $39.48; South Dakota, $117.94.

Tennessee, $37.57; Texas, $57.04; Utah, $84.86; Vermont, $70.03; Virginia, $48.60.

Washington, $110.61; West Virginia, $72.31; Wisconsin, $97.46; Wyoming, $141.82.

IMPORTANT SCHOOL-BOND SALES OF THE PAST MONTH

April to May

Alabama—Mobile Co., School, W. C. Griggs, Supt., Mobile, Ala	$ 250,000
California—Fresno Co., Fresno High Sch. Dist., C. Edwards, Supt., Fresno, Calif.	500,000
Indiana—South Bend, Sch. Dist., W. W. Borden, Supt.	300,000
Massachusetts—Reading, School, A. L. Safford, Supt.	330,000
Michigan—Iron River Tp., Sch. Dist.	250,000
Michigan—Muskegon, Sch. Dist., M. W. Longman, Supt.	250,000
Michigan—Lake Tp., Sch. Dist. No. 2	369,000
Missouri—Kansas City, Sch. Dist., I. I. Cammack, Supt.	2,000,000
New York—Middletown, School, E. H. Burdick, Supt.	490,000
New York—New York, School Construction, Dr. Wm. O'Shea, Supt.	$1,250,000
New York—Niagara Falls, School, Series G, James F. Taylor, Supt.	400,000
New York—Rochester, Revenue (School), H. S. Weet, Supt.	625,000
New York—Syracuse, School, P. M. Hughes, Supt.	980,000

PARALYTIC WINS PHILADELPHIA BOY AWARD FOR 1927

Edward Tremain, who has been paralyzed for 17 of his 20 years and confined to a room in Episcopal Hospital, Philadelphia, has been awarded the Philadelphia Boy Award for 1927, the highest honor the city can bestow upon a minor. In spite of the fact that he cannot walk and his arms are warped by suffering he is studying law and is a high-school student in good standing. (Wide World Photo.)

Ohio—Berea, Sch. Dist., M. M. Berry, Supt.	$ 600,000
Ohio—Columbus, Sch. Dist., J. G. Collicott, Supt.	500,000
Ohio—Dayton, Sch. Dist., Paul C. Stetson, Supt.	1,200,000
Oregon—Klamath Co., Union High Sch. Dist. No. 2, Fred Peterson, Supt., Klamath Falls, Oreg.	300,000
Pennsylvania—Kingston, Sch. Dist., C. B. Hanyen, Supt.	800,000
Pennsylvania—Williamsport, Sch. Dist., A. M. Weaver, Supt.	300,000
Rhode Island—Providence, School, Isaac O. Winslow, Supt.	1,000,000
Rhode Island—Woonsocket, Junior High School, James F. Rocket, Supt.	400,000
Texas—Amarillo, Ind. Sch. Dist., Wm. A. McIntosh, Supt.	600,000

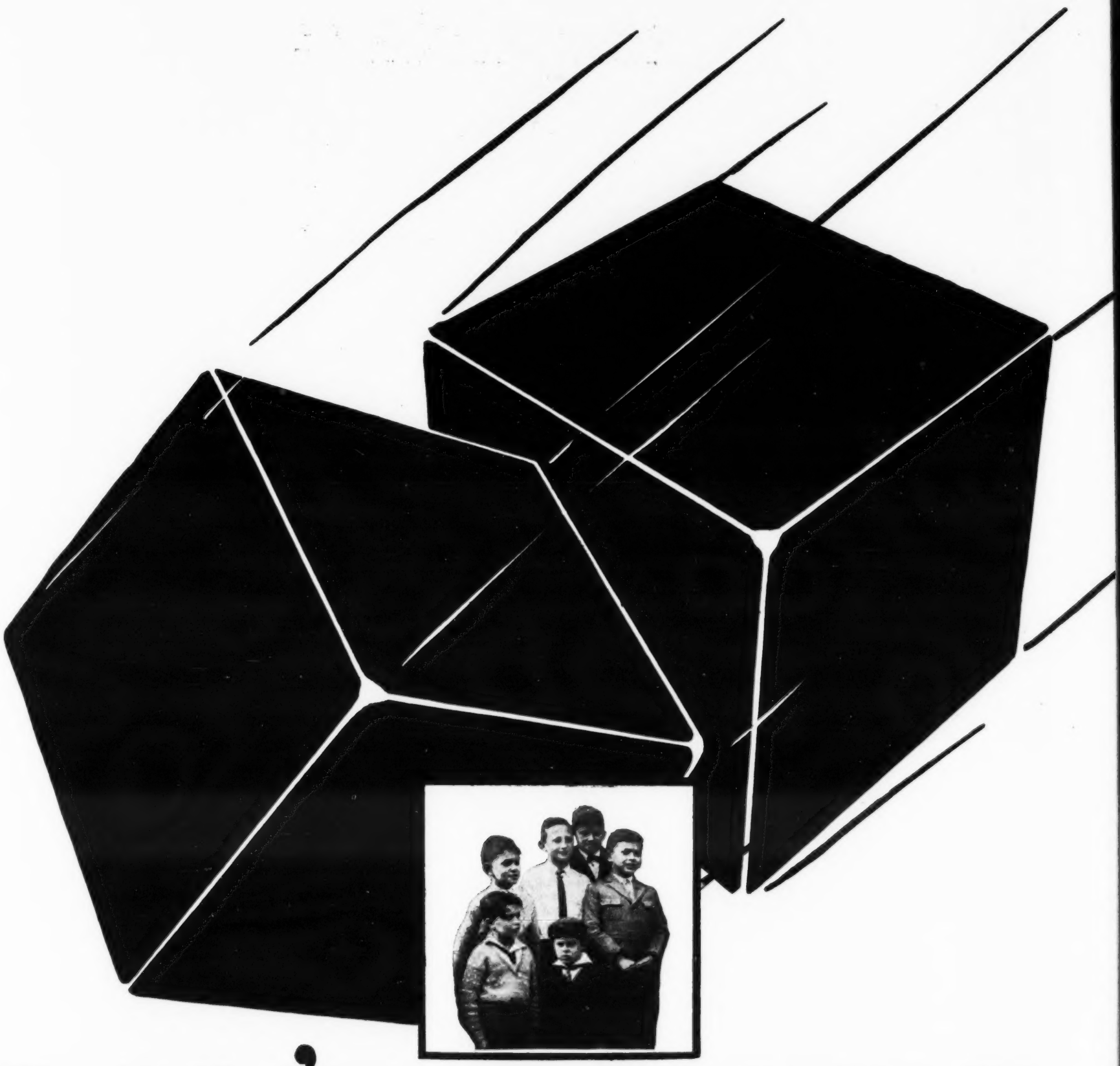
HYGIENE AND SANITATION

—A systematic attempt has been made in New York to immunize against diphtheria all children in the state up to 10 years of age. The movement is under the direction of the state department of health in cooperation with medical organizations of the state and the state charities-aid association. The campaign involves a five-year program and the work is followed up by the medical inspection bureau of the state education department.

—School nurses of Illinois cities are threatened with loss of their positions as a result of action on the part of the state legislature in voting down the Swift bill which gave school boards the right to name nurses. The bill sought to legalize the situation created when Attorney General Carlstrom found, in the case of the city of Highland Park, that school directors and boards of education had no right to employ nurses in the schools.

Both Elgin board of education members and school officials have been more than pleased with the work accomplished by the corps of nurses in the last few years. Of particular importance was the work done by these nurses a year and a half ago when the city was visited by a serious scarlet fever epidemic.

—Boston, Mass. The school board has created the position of supervisor of nutrition classes and has elected Dr. Clara Loitman to the position. Boston claims to be the first city to establish rest and nutrition classes, the first of which was begun in the Grant School in East Boston.



DON'T GAMBLE

with school children's health

Automatically protecting with the closet

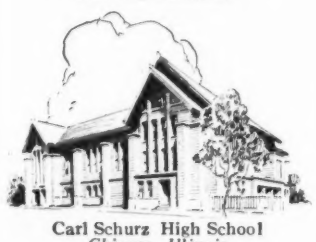
Bloomington High School
Bloomington, Illinois
27 Clow Closets installed
Architect:
A. L. Pillsbury
Plumber:
Ross Johnson

El Paso High School
El Paso, Illinois
22 Clow Closets installed
Architect:
A. L. Pillsbury
Plumber:
Walsh & Slattery

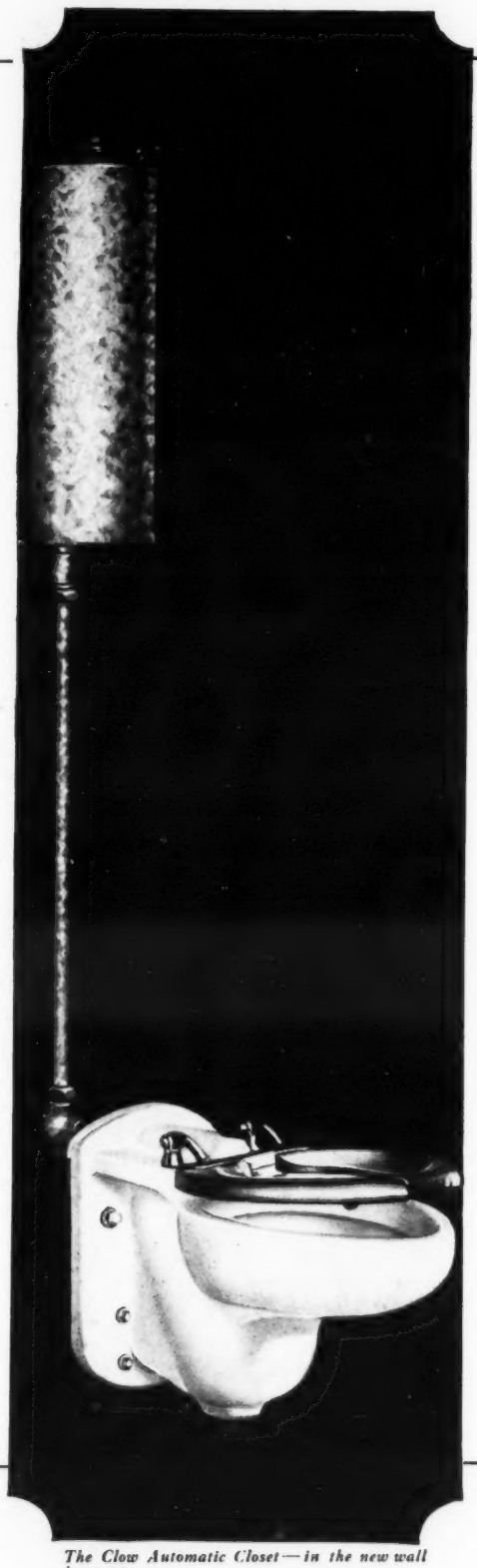
Gregory School
Chicago, Ill.
40 Clow Closets installed
Architect:
John C. Christensen
Plumber:
Murphy Plumbing Company

Austin, Minnesota, High School
94 Clow Closets installed
Architect:
G. L. Lockhart
Plumber:
J. P. Adamson & Company

Byers Junior High School
Denver, Colorado
44 Clow Closets installed
Architect:
Wm. N. Bowman & Company
Plumber:
Johnson & Davis Plumbing & Heating Company



Carl Schurz High School
Chicago, Illinois
100 Clow Closets installed
Architect:
John C. Christensen
Plumber:
Murphy Plumbing Company



The Clow Automatic Closet—in the new wall hung type.

Don't trust childish memories

WE cannot gamble with school sanitation—school children's health is too precious, too easily affected by insanitary conditions.

Children — their minds filled with thoughts of play—often forget that duty essential to complete sanitation. Without Clow Automatic Closets, that forgetfulness might hinder sanitation, causing unhealthy conditions —and sickness.

It Never Forgets

With the Clow Automatic, there can be no doubt of complete sanitation in your school. The Clow Automatic Closet never forgets. Every time it is used, it flushes itself automatically. The responsibility of school sanitation is completely removed from childish memories.

Its Flush Is Sure

Because its closed top tank fills against air pressure—the Clow Automatic Closet has the flushing pressure of a thirty to forty-foot standpipe. Unfailingly, after every use, this sharp flood of water, under pressure, scours the entire bowl.

JAMES B. CLOW & SONS

CLOW
AUTOMATIC CLOSET

Forty-Eight Styles, Heights And Types To Meet Your Requirements

the health of school children that never forgets

Clow Automatic Never Forgets

And the Clow Automatic Closet Bowl is the only bowl designed for automatic flushing. It distributes the water equally to rim and trap. Every part receives a thorough scouring.

Upkeep is Low

The Clow Automatic takes a feed pipe as small as ⅜-inch, and a correspondingly small main line pipe. Installation cost and water costs are lowered.

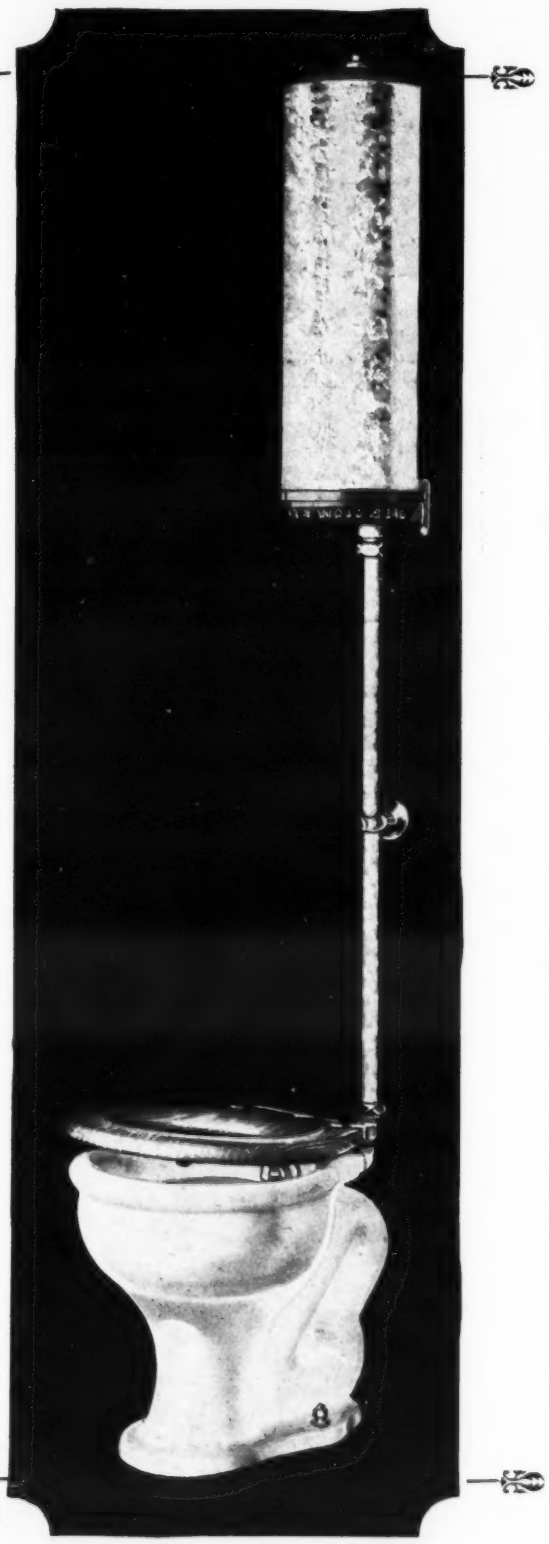
The Madden valve, with but two moving parts, does not waste a drop of water. With each use, the amount needed is accurately measured.

Forget Sanitation Problems

Forget Sanitation in your school when Clow Automatics are installed—they never forget. Forget repair costs. Forget replacement costs. Clow automatic long-life, low cost records prove the ability of these automatic closets to guard sanitation in the school for a quarter-century and more.

Your copy of our new "Clow School Plumbing Catalogue" is ready. Send for it now, and plan your plumbing needs before school starts this fall.

201-299 N. Talman Avenue, Chicago

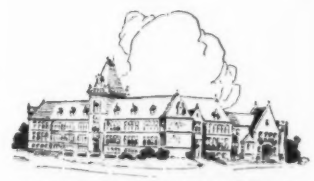


The Clow Automatic Closet—one of the forty-eight models that are shown in "The Clow School Plumbing Catalogue."

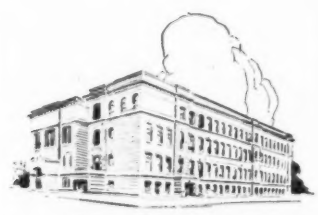
Bronxville High School
New York City
62 Clow Closets installed
Architects:
Guilbert & Betelle
Harry Leslie Walker
Plumbers:
Moran Engineering Co.

Emerson High School
Gary, Indiana
28 Clow Closets installed
Architect:
W. B. Ittner
Plumber:
C. H. Maloney

Alvernia High School
Chicago, Ill.
60 Clow Closets installed
Architects:
Brust & Phillips
Plumber:
M. J. Corboy



Woodrow Wilson High School
New Rochelle, N.Y.
28 Clow Closets installed
Architects:
Guilbert & Betelle
Plumbers:
George E. Gibson Co.



Bryn Mawr School
Chicago, Illinois
27 Clow Closets installed
Architect:
John C. Christensen
Plumber:
Murphy Plumbing Company

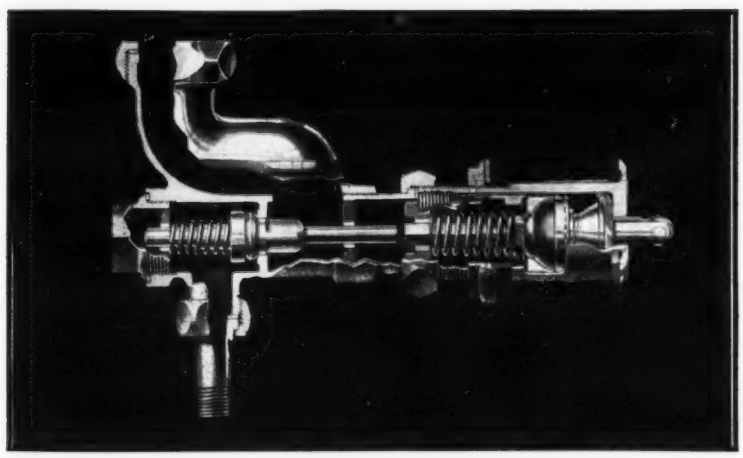
El Paso, Texas, High School
71 Clow Closets installed
Architect:
Trost & Trost
Plumber:
L. B. McChesney

CLOW
AUTOMATIC CLOSET

Forty-Eight Styles, Heights And Types To Meet Your Requirements

Why Clow Automatics Last

Twenty, Thirty Years and More



The Clow-Madden Valve. Note the simplicity of the whole assembly—with but two moving parts.

Closets are as good as their valves—most of them show their age there first.

The Madden Valve keeps Clow Automatic Closets operating for years and years without forgetting.

With but two moving parts in the entire assembly, there is virtually nothing to go wrong.

Simple, yet wonderfully efficient, this Madden Valve does not depend on intricate, easily worn valves and floats. It is far less complicated than any closet valve on the market today.

And actual performance records show that Clow-Madden valves last longer—ask less for repair costs.

Send for our new school plumbing catalogue showing how schools can *assure* complete, automatic, sanitation for the next quarter century.

JAMES B. CLOW & SONS

201-299 N. Talman Avenue, Chicago

CLOW

AUTOMATIC CLOSET

Forty-Eight Styles, Heights And Types To Meet Your Requirements

NEW RULES & REGULATIONS

RULES GOVERNING ABSENCES

—Boston, Mass. The school board has revised the rules governing absence of teachers. Under the new rules, the superintendent may grant leaves of absence to teachers, members of the supervising staff, secretaries, clerical assistants, and bookkeepers for the causes, and not to exceed the periods named below:

(a) Personal illness (not to exceed one year).	
(b) Weddings	1 day
(c) Ordinations or entrance into religious orders	1 day
(d) Death in the immediate family	*5 days
(e) Critical illness in the immediate family (in each school year)	20 days
(f) Attendance at the funeral of a teacher or school officer in the employ of the city or of a principal emeritus	1 day
(g) Attendance at funerals	1 day
(When travel is required), not more than	2 days
(h) To act as readers for college entrance examination board.	
(i) Jewish holidays	3 days
(j) Service in teachers' institutes held under the direction of state boards of education or to take part in teachers' associations, or in the case of nurses, similar educational conference (in each school year)	3 days
(k) Court attendance on school business.	
(l) To take promotional examinations or examinations for certificate of qualifications.	
(m) To receive a degree at a college or university	1 day
(n) Personal business.	

*Consecutive calendar days, which period shall include and may also immediately precede or immediately follow the day of the death.

RULES OR NO RULES FOR SCHOOLS

The question as to whether a small school system ought to advance a set of rules and regulations has recently been made by Prof. A. L. Heer of the Michigan State Normal College. He quotes J. Cayce Morrison, an Illinois school superintendent, who gives the reasons for a lack of rules as follows:

(1) The present situation is satisfactory; rules are not needed; (2) rules are too inflexible, the superintendent has a freer hand without them; (3) if the board and superintendent are not in harmony, better change superintendents; and (4) boards will delegate powers to the superintendent as rapidly as he is able to take care of them.

Advantages which are to be gained by printed rules and regulations are worthy of being noted:

1. Are less likely to be misunderstood.
2. Clarify the thinking of the person who issues them.
3. Insure assignment of all the functions of the school organization and definitely fix responsibility for each function.
4. Serve as records for a new administration or for the new personnel of the schools, thus facilitating the training of the new personnel.
5. Lessen the possibility or misunderstanding between the board of education and the superintendent of schools; and between the superintendent of schools and other employees of the board of education.

Prof. Heer adds: "An efficient set of rules and regulations cannot be produced by magic. Much work and thought, considerable time, experimenting, and changing, and a keen insight into the purposes of the organization and the various functions of all its parts are required.

"Where written rules and regulations are used, care must be exercised that they are kept up-to-date. All changes must be indicated, else the rules will be misleading and confusing. Rules should always coincide with practices. There is an ever-present danger of rules becoming so fixed that changes are unlikely to occur. This must be guarded against, or every one concerned will lose his respect for them. So that changes and additions may be easily indicated, they should be printed in looseleaf form or have a sufficient number of blank pages in the book."

RULES AND REGULATIONS

—Cincinnati, Ohio. The board of education has adopted a set of regulations covering the use of public-school properties by the public recreation commission. The rules were recommended by a committee consisting of school officers and principals, and representatives of the commission.

The new rules provide that the board of education is to have priority in the use of school properties; that the commission in its recreational work is to provide adequate supervision; that the rules of the board apply to all entertainments given to raise money; that dances be made community rather than general affairs; that smoking be prohibited in school buildings.

—The Omaha, Nebraska, board of education has ruled that school halls may be used for citizens' meetings and lectures provided that the subjects of religion and politics are omitted.

—The school committee of Brookline, Mass., has ordered that all subcommittee proceedings be sent to the members in order to enable more intelligent deliberation. Action relative to reports of subcommittee meetings resulted from a motion of Richard C. Floyd, who vigorously declared that he believed that all members of the board should know what has been done at these sessions in order that they could vote intelligently on matters presented to them. He contended that if anything goes wrong in the conduct of the school affairs, the full board and not the particular subcommittee which attended to the matter is responsible, and all members should, therefore, have all available information regarding details of administration.

—The Nutley, New Jersey, board of education received a recommendation from its teachers' committee barring married-women teachers. The board modified the rule so as to exempt the sixteen married women now teaching in the schools.

—The board of education of Salem, New Jersey, adopted the following tuition schedule: primary schools, $60 per month; grammar, $70 per month, and high schools, $90 per month. Other school boards in South Jersey have made similar raises.

SCHOOLHOUSE DEDICATIONS

—The dedication of the $365,000 high school at Babylon, N. Y., was attended by 1,000 persons. The keys of the building were presented to Mrs. Josephine MacLachlon, president of the board of education, who in turn presented them to Principal Charles W. Armstrong.

—The new grade school at Baltic, Ohio (near New Philadelphia), was opened with a dedicatory address by W. B. Bliss, assistant state director of education. The presentation was made by President J. A. Schafer of the board of education. Principal J. H. Selzer made the acceptance speech.

—The Elizabeth A. Harter school at Canton, Ohio, was dedicated with appropriate ceremonies. Supt. Wilson Hawkins and President H. C. Bercaw were the principal speakers.

—The dedicatory address at the opening of the junior-senior high school at Mitchell, Nebr., was delivered by President R. I. Elliott of the Chaldron state normal school. An address was also delivered by C. S. Campbell, secretary of the board of education.

BUILDING NEWS OF THE SCHOOLS

PHILADELPHIA BUILDS SCHOOLS

The school-building operations of Philadelphia for last and this year, which are a part of a definite program, have assumed considerable proportions. The character and extent of these operations may be noted from the following statement:

School Buildings Completed During 1926

School	Maximum Capacity	Cost
Senior High		
Overbrook	3,500	$2,170,191
Trade and Continuation	1,200	1,019,026
Elementary		
Conwell	1,170	461,783
Kirkbride	1,690	486,437
Wister	1,035	332,982
Stanton	1,035	332,721
Emlen	1,375	482,895
Lowell (addition)	490	123,134
Total	11,495	$5,409,169

Buildings Placed Under Contract During 1926

Junior High		
FitzSimons	2,000	$1,221,992
Tilden	2,000	1,241,087
(Unnamed)	2,000	1,180,315
Elementary		
Stevens	1,170	530,835
Ludlow	1,655	499,356
Wolf	1,165	550,684
Darrah	1,035	365,731
Boone (special classes)	500	387,698
Pennell	1,420	503,880
Harrington	970	428,540
Houston	1,115	510,547
Hopkinson	1,520	543,497
Olney (addition)	570	282,603
Total	17,120	$8,246,765

Other Buildings Under Construction During 1926 (Not Included Under Above Headings)

Senior High		
Gratz	3,500	$2,113,950
Junior High		
Gillespie	2,000	1,148,634
Shoemaker	2,000	1,238,341
Elementary		
Reynolds	1,600	444,134
Total	9,100	$4,945,059

BUILDING NEWS

—Schenectady, N. Y. The board of education will shortly adopt a new building program, which will include a new high school, improvements to intermediate schools, and additions to elementary schools.

—A bill has been introduced in the Tennessee legislature providing for an elementary school-building fund of $1,000,000, which is to be amortized and retired out of revenues received from the tobacco tax. The money will be distributed among the various counties of the state on the basis of average daily attendance in the schools.

—Oklahoma City, Okla. The school board has included in the budget the sum of $114,827 for new buildings. Last year the sum of $114,355 was provided for new buildings.

—Sandusky, Ohio. The school board has readvertised for bids on $280,000 worth of bonds for the new junior high school. It is believed that a higher premium may be obtained by asking for a second set of bids.

—Compton, Calif. The voters of the city have approved a bond issue of $100,000 for new school construction.

—Joplin, Mo. The school board will complete a building program of $750,000 within a two-year period, instead of three years as was first estimated. The board has thus far expended $77,000 for building sites, $518,000 for buildings, and $4,889 for furniture. The sum of $2,748 was expended for the marketing of the school bonds.

—Lowell, Mass. The school board has received a report on the results of the recent school survey which tells about the existing conditions and the needs of the future. The program recommended calls for an estimated expenditure of $2,186,000 in a period of seven years. It recommends the acquisition of sites for three junior high schools, two elementary schools, and an addition to an existing site.

—Danville, Va. The school board has called for a bond-issue election at which the people will be asked to approve the issuance of $450,000 for the renovation of the school plant.

—Pottsville, Pa. The voters recently defeated a proposition to borrow $800,000 for a high school.

—Columbus, Ohio. The school board has approved an emergency building program, calling for an expenditure of $156,175 for repairs to buildings and the establishment of kindergartens.

—Harrington, Pa. A meeting of the taxpayers of the school district has been called to study plans under which the district may benefit from a school-building fund of $2,000,000 passed at the last legislature session. A new high school is badly needed to relieve the crowded condition in the school.

—Fairmont, W. Va. The voters have approved a bond issue of $940,000. The proceeds of the issue will be used for the erection of a senior high school, a combination grade-and-high school for colored pupils, and two annexes to elementary schools. Mr. William B. Ittner of St. Louis, Mo., has been appointed as architect for the board of education.

—Bangor, Pa. The school district has completed the erection of a two-story addition to the high school. The addition contains an auditorium, eight classrooms, and two special rooms, and showers and lockers for boys and girls.

—Carlisle, Pa. A school-building program involving an expenditure of $335,000 has been put in operation. A ten-room grade school and an addition to the high school comprised the program.

—Altus, Okla. A four-room school has been erected for the school district. The school was erected with the aid of funds from the Rosenwald Fund.

—Brenham, Tex. A bond issue of $180,000 has been voted by the citizens. A high school will be erected at a cost of $135,000.

—Boston, Mass. The school board has recently fixed the compensation for custodians of new buildings accepted for school use. The custodian is required to furnish 24-hour heat to a new building. He is allowed and paid, in addition to the regular compensation for the building, $8 per day for each day that 24-hour heat is needed. The compensation is paid on weekly certificates to the business manager by the custodian, covering the period beginning with Friday of one week and ending with Thursday of the following week.

—Worcester, Mass. Upon the recommendation of the chairman of the building committee, the board of education will undertake a number of changes in the direction of building improvement.

It is requested that new schoolhouses and additions to schoolhouses be equipped with wardrobes within the classrooms; but separated by folding doors. Such wardrobes should be placed in the rear of the rooms and should be ventilated by direct connection with the ventilating system. In new buildings and additions to buildings, the blackboard should consist of slate in preference to painted board. It is desired that all exterior doors of new schools and additions to schools be equipped with panicproof hardware.

(Concluded on Page 84)

Your Responsibility

YOU know the importance of ventilation in school buildings. You realize, perhaps more fully than others who have to do with such buildings, that fresh air properly circulated is not only essential for physical and mental alertness and good health, but may actually save human lives by helping to prevent colds, tonsilitis, influenza, and other diseases. Is it not, therefore, *your duty* to insist upon the best heating and ventilating equipment that modern engineering has developed?

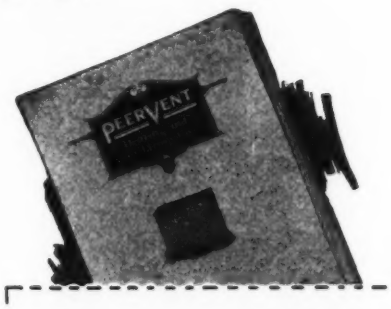
With PeerVent Units, each room gets a specified volume of fresh air, directly from out-of-doors, warmed to any desired temperature and thoroughly diffused without drafts. Children can sit close to the Unit without discomfort from excessive heat, or at any distance from it without being too cold. Those sitting near windows need not suffer for the sake of those at a distance, or vice-versa. Each room served by the PeerVent System is under separate control, hand or automatic, which keeps the temperature just right, regardless of exposure, weather, direction of wind, or conditions in other rooms.

Planning and installation are easier and less expensive than with other systems of mechanical ventilation; and the Unit System is above all *dependable*. As to the latter, even if a single unit should fail to function at any time, not more than one room in the building could possibly be affected in any way. Heating-ventilating units made and installed by this Company *thirteen years ago* are still giving trouble-free service.

Write for the PeerVent Catalogue and list of installations in your vicinity. If you'd like to see our local representative, please so state.

PEERLESS UNIT VENTILATION CO., INC.
Skillman Avenue and Hulst Street (B)
Long Island City, N. Y.

BOSTON
100 Boylston St.
SPRINGFIELD, MASS.
196 Worthington St.
PITTSBURGH
301 House Building
HARRISBURG
705 Telegraph Bldg.
BUFFALO
135 University Avenue
CLEVELAND
1836 Euclid Avenue
DETROIT
1214 Lafayette Bldg.
MINNEAPOLIS
240 7th Avenue South
CHICAGO
808 Monadnock Bldg.
DES MOINES
520 Securities Building
PORTLAND, ORE.
927 Board of Trade Bldg.
TORONTO, CANADA
Darling Bros., Ltd., 77 York St.



Mail This Coupon for Catalogue

Name.....

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B

PEERVENT

Heating and Ventilating Units

(Concluded from Page 82)

—Mr. W. E. Record, business manager of the board of education, Los Angeles, California, has issued a report on the progress of the school-building program which is nearing completion. The report shows the school buildings now under construction, school buildings for which plans are in course of preparation, and school buildings completed since July 1, 1925.

A total of 251 school buildings have been completed since July, 1925, at a cost of $17,391,221. Of the 251 buildings, 132 are elementary schools, 21 are junior high schools, and 23 are senior high schools.

A total of 24 schools are in course of construction, at a cost of $3,679,261. Of these, 9 are elementary schools, 4 are junior high schools, and 10 are senior high schools.

A total of 29 schools for which plans have been prepared will be erected at a cost of $1,993,150. Of these, 17 are elementary schools, 3 are junior high schools, and 5 are senior high schools.

Of the schools in course of erection or about to be erected, 26 are elementary schools, 7 are junior high schools, 15 are senior high schools, and 5 are bungalow buildings. The total cost of these projected buildings is $5,675,401.

—Mandan, N. Dak. The board of education has taken steps toward the adoption of a scientific building program for the city schools. A building survey has been made showing the trend of the school population for the last two decades and the probable requirements for the next 25 years.

The growth of the city and the westward trend of the population center have thrown a heavy burden upon the Central and Syndicate schools. The former was erected in 1900 to house the entire school system. Later the Custer school was built, and five years after, a third grade school was erected. In 1918 a high school was erected, which was used until 1923, when a new and more adequate building was erected for the senior high school and the old building turned into a junior high school. The Central school while adequate for the present for grade purposes, will in a few years be overcrowded.

—Three schoolhouses have been shipped from Seattle to Alaska. Besides the knockdown schoolhouses, there are blackboards, crayons, pencils, erasers, and paper as part of the school supplies for a section of the far-flung educational organization in the territory. The vessel also carried supplies and industrial equipment for the industrial school at Eklutna, 28 miles south of Anchorage, on the government railroad.

—East Chicago, Ind. The school board has taken steps toward the erection of an elementary school. The new building is the result of an increase in school population.

—Spencer, N. C. A high-school building has been completed at a cost of $200,000. The building will have a gymnasium accommodating 500 persons and an auditorium with accommodations for 1,200 persons.

—Walden, N. Y. A junior-senior high school is being erected at a cost of approximately $300,000. The building will be occupied in September.

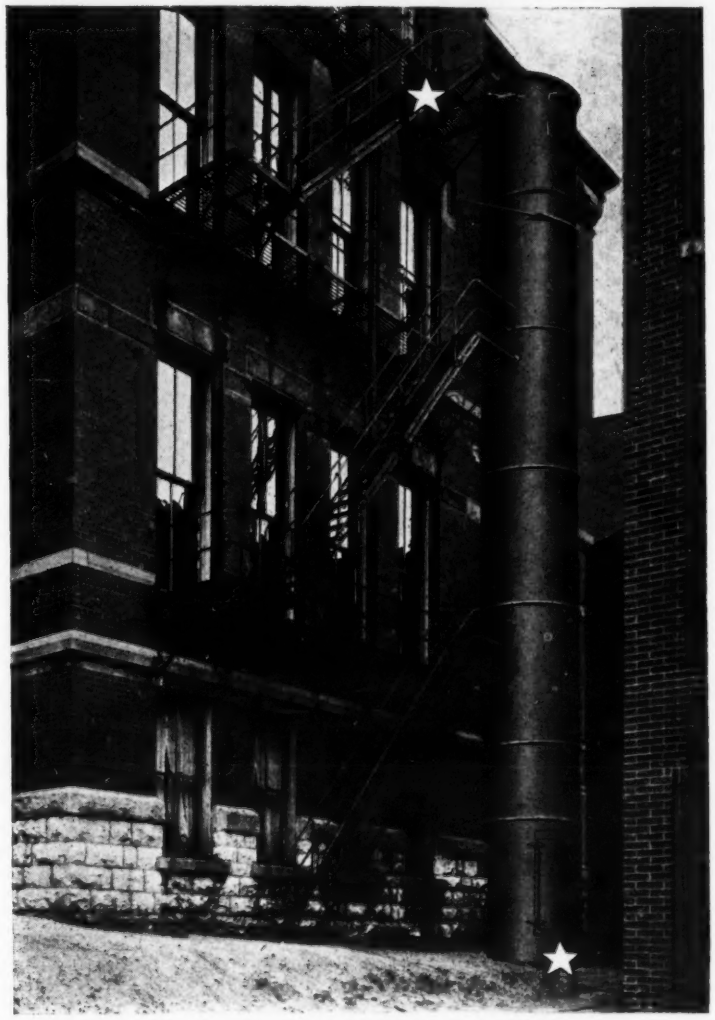
—Nashville, Tenn. The city council has been asked to approve the issuance of short-term notes extending over a period of five years, covering a one-mill tax, to be used for school-building purposes. The board of education has begun a study of plans for a school-building program which is to be carried out if the proposed short-term notes are approved.

—Indianapolis, Ind. The new building program for the Arsenal Technical High School, to be begun early this summer, will involve a gymnasium-auditorium, and 46 classrooms, and will cost approximately $750,000. The building will provide 25,000 square feet of space for the housing of the United Typothetae School of Printing. The auditorium will seat 5,000 persons and will cost $200,000.

STREET HAZARDS IN LONDON

So perilous have the streets of London become that the London County Council has had to draft special regulations to restrict the sending of children on errands. The reason is that one child is killed or injured every twenty minutes during the period that the school children are out of school. The "Bobby" illustrated is a busy and popular man and leads hundreds of children across the "Stockwell Crossing" each morning and night. (Wide World, Photo.)

Newspapers are continually publishing gruesome reports of loss of life by fire and panic. Stairs are dangerous. Every school building of two or more stories should be adequately protected by the Logan Spiral Slide.



Public School, Des Moines, Ia.

WHY this School, already equipped with step escapes, *also installed a Logan Spiral Slide!*

THE school board realized that the step escape with which the building was already equipped was inadequate in three ways:

It was not protected from bursts of flame from windows.

It did not have proper capacity.

The use of any step escape requires both physical and mental effort.

A Logan Spiral Slide Fire Escape was therefore installed because:

Larger Capacity

The Logan Spiral Slide has many times the capacity of a three-foot, outside step escape. Furthermore it requires no physical or mental effort to use.

Entering the Logan Spiral Slide from two floors at the same time —no interference

Children enjoying the slide— every fire drill is a lark

Greater Speed

The speed and safety of the Logan Spiral Slide were amply demonstrated in the following test: *By the time a person had reached the sixth step on the step escape, another person, starting at the same time in the Logan Spiral, had reached the ground in safety! The stars in the photograph show the positions of the two persons at the end of the test.*

Fully Enclosed

The Logan Spiral Slide is completely enclosed. Safe against flames and weather. It is just a fast, smooth slide to safety.

Logan Spiral Slides were installed *in addition to the step escape* for the Public School at Des Moines because they are essential to 100% protection—the world's safest device for exit from upper floors. *What about some of your buildings which have no fire-escapes at all?* Write for full details today—or tell us to send our engineer.

Logan Co.

(FORMERLY THE DOW CO.)

300 N. Buchanan St., Louisville, Ky.

PERSONAL NEWS OF SUPERINTENDENTS

DR. HAAS GOES TO NEW POSITION

Dr. Francis B. Haas, formerly state superintendent of public instruction of Pennsylvania, has been elected as principal of the State Normal School at Bloomsburg. Dr. Haas will go to Bloomsburg at the close of the school year.

Dr. Haas was educated in the public schools of Philadelphia and was graduated from the Central High School in 1904. He attended the Philadelphia School of Pedagogy and was graduated in 1906. He then taught at Girard College and in the public schools of Philadelphia, becoming principal of the Breck School in 1916, and of the Benson School in 1918. He was appointed assistant director of the bureau for teachers in the state education department in 1920, and two years later was promoted to the directorship of the administration bureau of the department. He was appointed deputy superintendent in 1924. Dr. Haas holds two degrees, one given by Temple University in 1913, and one from the University of Pennsylvania awarded in 1922.

During Dr. Haas' teaching career he reorganized the work of the upper grades and in the specialization of teaching which the change involved he emphasized his ability as a teacher. In the field of teacher-training the influence of his personality and character on young men preparing for teaching positions was parallel to the fine relationships which he enjoyed with the boys and girls of school age.

When Dr. Haas took up his duties in the department of public instruction, he brought a rich heritage to the work, gathered from his experience as a teacher and principal in elementary schools, as professor and demonstrator in the Philadelphia School of Pedagogy, and as a leader and promoter of all forms of educational activity.

PERSONAL NEWS OF SUPERINTENDENTS

—Mr. J. L. Robertson, formerly prominent as an educator at Peoria, Ill., died April 18 at Milwaukee, Wis., at the age of 65. Mr. Robertson served as superintendent of schools in Peoria county from 1894 to 1902, and later as superintendent in Chillicothe and East Peoria.

—Supt. A. A. Rather of Ionia, Mich., has been reelected for a two-year term.

—Mr. W. H. Hill has been elected superintendent of schools at Gridley, Ill.

—Dr. C. R. Foster, first associate superintendent of schools at Pittsburgh, Pa., has resigned in order to become principal of the Indiana Normal School. Dr. Foster had been connected with the Pittsburgh school system for 22 years.

—Mr. J. M. Herrmann of Belview, Minn., has been elected superintendent of schools at Lanesboro. Mr. Herrmann is succeeded by Mr. M. W. Agre of Reading.

—Supt. Everett R. Bristol of Almont, Mich., has been restored to the superintendency by a decision of the school board. Supt. Bristol was removed by the school board when he refused to yield to demands of certain members that a girl released from the girls' training school at Adrian be refused admittance to the high school. The removal of Mr. Bristol was followed by a strike of the high-school students which ended when he was reappointed.

—Mr. W. J. Hunting has been elected superintendent of schools at Lovelock, Nev.

—Mr. Floyd Boughner has been elected superintendent of schools at Marine City, Mich., to succeed A. T. Greenman.

—Supt. C. W. Shumway of Vancouver, Wash., has been reelected after a service of 32 years.

—Supt. H. V. Calhoun of Belleville, Ill., has been reelected for the next year.

—Supt. K. C. Smith of Williamsburg, Iowa, has been reelected for another year.

—Mr. L. R. Taylor of Stanton, Iowa, has been elected superintendent of schools at Corning.

—Supt. E. G. Littlejohn of Galveston, Texas, has been reelected for his third consecutive term.

—Supt. L. A. White of Minot, N. Dak., has been reelected for a three-year term.

—Supt. R. V. Cramer of Lebanon, Mo., has resigned to enter Missouri University and Columbia University, where he will complete his work for a doctor's degree.

—Mr. Henry S. Keith has been elected supervising principal of schools at New Freedom, Pa.

—Supt. S. F. Bucher has been reelected as head of the schools of Wellsburg, W. Va.

—Supt. C. E. Vance of Danville, Ill., has been reelected for a three-year term.

—Supt. William Harris of Decatur, Ill., has been reelected for another year.

—Asst. Supt. William B. Snow of Boston, Mass., has been reelected for a six-year term, at a salary of $6,000 per annum.

—Supt. V. A. Helfenstien of Bedford, Iowa, has been reelected for another year.

—Supt. Frank L. Smart of Davenport, Iowa, has been reelected for another three-year term.

—Supt. F. H. Bair of Colorado Springs, Colo., has resigned in order to accept the superintendency at Shaker Heights, Ohio.

—Miss Maude Frazier has been elected superintendent of schools at Las Vegas, Nevada, to succeed H. A. Whiteneck.

—Supt. M. F. Beach of Moberly, Mo., has been reelected for another year.

—Supt. J. E. Anderson of Benson, Minn., has been reelected for another year.

—Supt. L. C. Sims of Hitchcock, S. Dak., has been reelected for another year.

—Mr. F. E. Fagan of Woodburn, Oreg., has been elected superintendent of schools at McMinnville.

—Mr. A. L. Alexander, 67, formerly superintendent of schools at Lincoln, Ill., died at Asheville, N. C.

—Mr. F. J. Moore of LaPorte, Iowa, has been elected superintendent of schools at New Hampton.

—Supt. H. C. Bell of Luverne, Minn., has been reelected for a seventeenth consecutive term.

—Supt. S. M. Archer of New Bremen, Ohio, has been reelected for a three-year term.

—Supt. L. E. Johnston of Mancelona, Mich., has been reelected for another year.

—Mr. Emery L. McLaughlin has been elected superintendent of schools at Fordson, Mich. Mr. McLaughlin was formerly principal of a school in Highland Park.

—Dr. Marvin S. Pittman, director of rural education of the Michigan Normal College, is the Democratic candidate for the office of state superintendent of public instruction.

(Continued on Page 88)

(Continued from Page 86)

—Mr. L. S. Marshall has been reelected as supervising principal of schools at Springdale, Pa.

—Supt. E. A. Sparling of Muscatine, Iowa, has been reelected for the next three years.

—Mr. W. C. Rohleder of Hillsboro, Ohio, has been elected superintendent of schools at Grandview.

—Mr. John Ritchey has been elected superintendent of schools at Stillwater, Okla., to succeed Paul Bennett.

—Supt. G. E. Dille of Chillicothe, Mo., has been reelected for another year.

—Mr. M. A. Nash, state superintendent of public instruction of Oklahoma, has resigned in order to accept the presidency of the Oklahoma College for Women at Chickasha. Mr. John S. Vaughan of Durant has been appointed to succeed Mr. Nash.

—Mr. L. D. Kepner of Warren, Ohio, has been elected superintendent of schools at Lisbon.

—Supt. L. E. Fulwiler has been reelected as superintendent of the United Township High School at East Moline, Ill.

—Frank W. Phillips of Monmouth, Ill., has been elected superintendent of schools at Freeport. Mr. Phillips succeeds S. E. Raines, who has resigned after completing thirty years of service.

—Supt. J. E. Langwith of Terrell, Texas, has been reelected for another year.

—Supt. L. A. Mahoney of Moline, Ill., has been reelected for another year.

—Supt. B. F. Shafer of Jacksonville, Ill., has been reelected for another year.

—Supt. S. P. Emmons of Mexico, Mo., has been reelected for his twenty-second year.

—Mr. Roy S. Lundin of Champaign, Ill., has been elected superintendent of the high school at Staunton for the coming year.

—Mr. C. V. Compton has been elected superintendent of schools at Union City, Tenn.

—Supt. Robert B. Browne of Pittsfield, Ill., has been reelected at a salary of $3,500.

—Supt. R. A. Grettenburger of Imlay City, Mich., has been reelected for the next year.

—Supt. C. L. Matheison of Memphis, Mich., has been reelected for another year.

—Mr. W. Roger Zinn of Clare, Mich., has been made principal of the high school at Marshall. Mr. G. Richard Bogan succeeds Mr. Zinn at Clare.

—Supt. B. P. Hamlin of St. Albans, Vt., has been reelected for a three-year term, with a substantial increase in salary.

—Supt. W. S. Smith of Excelsior Springs, Mo., has been reelected for a seventh consecutive term.

—Mr. W. W. Aukenbrand has been elected superintendent of schools at Charleston, Ill., to succeed O. C. Hostetler, who retires at the end of the term.

—Mr. Orville E. Taylor of Genoa, Ill., has been elected superintendent of schools at Galena, to succeed Mrs. Myrtle Hoor.

—Supt. J. R. Peace of Brenham, Texas, has been absent from his office and confined to the hospital since December. The administrative work has been carried on by Mr. Arthur Niebuhr, who has filled the office of acting superintendent most efficiently.

—Mr. J. W. Potter, acting superintendent of schools at Carlisle, Pa., has been elected superintendent to succeed the late J. C. Wagner.

—Supt. Cletus B. Mummart of Serena, Ill., has been reelected for a fifth consecutive term.

—Mr. Ben W. Frazier, formerly director of training in the Alabama State Normal School at Jacksonville, has been appointed specialist in teacher training in the Bureau of Education, Washington, D. C. Mr. Frazier has had a varied professional career, both in graduate training and in field experience, and is a frequent contributor to the professional periodicals of the school field. Mr. Frazier will take up his new work in Washington on June 16.

—Supt. J. J. Godbey of Ardmore, Okla., will be a member of the summer-school faculty of the School of Education, University of Oklahoma. Supt. Godbey will have charge of two courses, one undergraduate, and the other graduate, for elementary principals, and one course for junior high-school principals.

—Supt. Burt R. Porterfield of Upton, Wyo., has been reelected for another year, at an increase in salary. Supt. Porterfield is an enthusiastic supporter of the consolidation plan and Upton this year placed its first school bus line in operation. The route is of the shuttle type and is twenty miles long.

—Mr. A. B. Crawford of Lexington, Ky., has been elected superintendent of schools at Anchorage. Mr. Crawford was formerly director of the training school o. the University of Kentucky. He will enter upon his duties July 1.

—A newspaper says of Supt. H. P. Smith of Lawrence, Kansas, that "like the superintendent of a modern industrial institution he keeps in close touch with everything that is being done. He knows the character of service given by every teacher and the progress of every schoolroom in the city. He is not a glad-hander and lacks in personal magnetism, but he has the courage to do what he believes to be right and that has enabled him, with the support of the board of education, to make the schools of Lawrence the foremost in the state."

—J. Wood Henry, county superintendent at Searcy, Arkansas, tendered his resignation to take effect July 1. J. P. Akridge of Beebe was elected by the county board of education to succeed Mr. Henry.

—George Carroll, who succeeds J. O. Engleman as superintendent at Terre Haute, Indiana, will assume charge about the middle of June.

—Claude M. Holmes was reelected superintendent at Fayette, Iowa.

—C. A. Massey was reelected principal of the Wayne county, Mississippi, agricultural high school.

—C. W. Bangs was reelected superintendent at Manchester, Iowa.

—William B. Snow was reelected assistant superintendent of the Boston schools for a term of six years.

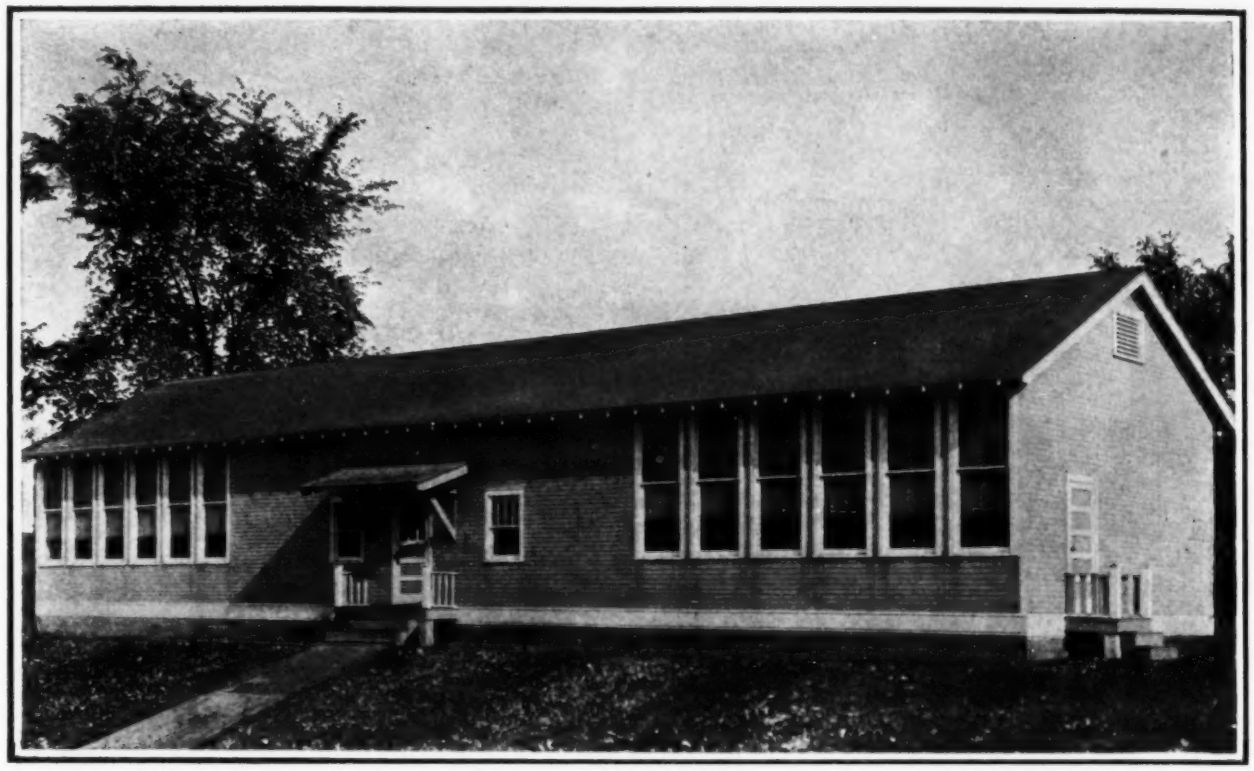
—Thomas R. Cole has been reelected superintendent at Seattle, Washington, for three years. His salary is fixed at $10,000 for one year, and $11,000 thereafter.

(Continued on Page 93)

CONSOLIDATION OF SCHOOLS

Educational policies have apparently been determined by many interests,—greed, selfishness, prejudice, envy, personal interests, political interests, and moneyed interests. However, all these have failed in their purpose.

Administrative problems, such as financing the rural schools, consolidation, selection of sites, selection of teachers, should all be tested as to whether or not it is for the benefit of the children. Consolidation of schools has provoked severe fights, and every argument has been advanced against it that it is possible for the human brain to imagine, but no valid argument has ever been advanced on consolidation based upon benefits to the children.—George Howard, County Superintendent, Salisbury, North Carolina.



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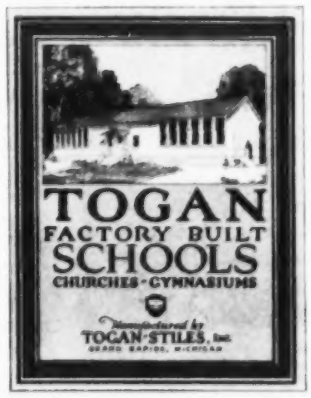

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TOGAN SCHOOLS

(Continued from Page 88)

—Supt. James M. Bickley of Clovis was appointed by the governor as a member of the state board of education of New Mexico. Mr. Bickley was at one time the president of the state educational association.

—It has been charged that the removal of Dr. David B. Corson from the superintendency of Newark, N. J., was a brutal proceeding. He had served thirty-three years and was asked to quit simply because he had reached the age of sixty-two. Miss J. Isabella Sims, president of the school board, makes reply by saying: "The law created by the schoolmen themselves made it possible for the retirement of Dr. Corson after he reached the age of sixty-two, either at his own request or at the request of the board. In view of this, explanations are entirely unnecessary. Dr. Corson's treatment at the hands of the board has been entirely professional. There was nothing sudden about it. He was given every opportunity to retire with dignity."

Mr. H. Claude Hardy, who has been superintendent of schools at Oneida, N. Y., has become associate superintendent of schools at White Plains, N. Y. He begins his duties July 1. Mr. Hardy will be assistant to Mr. John W. Lumbard, and will not succeed him, as was stated in the April issue of the JOURNAL.

Supt. M. G. Clark of Sioux City, Iowa, will deliver one of the addresses at the next meeting of the World Federation of Education Associations, to be held August 7-12, at Toronto, Canada. The association was organized at a meeting held in San Francisco in 1923, and a second meeting was held in 1925 in Scotland.

Mr. H. M. Corning of Trinidad, Colo., has been elected superintendent of schools at Colorado Springs to succeed F. H. Bair. The appointment is for a three-year term and carries a salary of $6,000. Mr. Corning is a native of Ohio and a graduate of Dickinson College, Pa., and of the teacher-training course at Columbia, Mo. He taught in Pennsylvania and served as superintendent at Newport. From there he went to Trinidad to accept the principalship of the high school. After one year he was elected superintendent.

Mr. M. G. Orr, superintendent of schools at Hugo, Okla., has been appointed as registrar of the Southeastern Teachers' College at Durant. Mr. Orr is succeeded at Hugo by Mr. Vance Posey.

—Mr. William Brown, of West Conshohocken, Pa., has accepted a position as supervising principal of schools at Clifton Heights.

—Supt. E. M. Eliassen of Spring Grove, Minn., has been reelected for a third term, at an increased salary.

—Supt. J. W. Ashbury of East Chicago, Ind., has been reelected for another year.

—Mr. Charles A. Thompson has been elected superintendent of schools at Roanoke, Ill.

—Supt. W. O. Stark of Belleville, Kans., has been reelected for another year.

—Mr. A. A. Slade of Casper, Wyo., has been elected superintendent of schools at Laramie, to succeed Mr. J. C. Knodle.

—Mr. H. H. Vanderflute of Leon, Iowa, has been elected superintendent of schools at Davis City.

—Mr. M. P. Gaffney has been elected superintendent of schools at Aberdeen, S. Dak.

—Supt. J. H. Westcoat of Meriden, Iowa, has been reelected for an eighth consecutive year.

—Supt. M. S. Beam of Albemarle, N. C., has been reelected for another year.

—Supt. William F. Knox of Jefferson City, Mo., has been reelected for another year.

—Mr. C. M. Moore has been elected superintendent of schools of the Williston-Elko school system at Williston, S. C.

—Mr. Charles E. Garner of Knox City, Mo., has been elected superintendent of schools at LaPlata.

—Mr. J. E. Hickman of Ada, Okla., has been elected superintendent of schools at Cushing.

—Supt. A. W. Smith of Carl Junction, Mo., has been reelected for another year.

—Supt. J. W. McCollom of Medford, Okla., has been reelected for a fifth consecutive term.

—Mr. Q. W. Stauffer of Jersey Shore, Pa., has been elected supervising principal of schools at Orwigsville.

—Mr. V. D. Patterson of Massena, Iowa, has been elected superintendent of schools at Griswold.

—Supt. S. A. Dennison of Pontiac, Ill., has been reelected for the ensuing year.

—Mr. Roy R. Anderson, principal of the Bradley Central High School, Cleveland, Tenn., has been elected superintendent of schools at Lenoir City, to succeed C. G. Gentry. Mr. Anderson is a graduate of Maryville College and holds degrees given by the University of North Carolina and Maryville College.

—Mr. M. E. Steele of Lacon, Ill., has been reelected as head of the school system for another year.

—Supt. C. E. Crawford of Bridgeport, Ill., has been reelected for another year.

—Supt. C. W. Shumway of Vancouver, Wash., has been reelected for a thirty-second term.

—Mr. Lewis Williams has been elected superintendent of schools at Ilwaco, Wash.

—Mr. M. C. Strauss has been elected superintendent of schools at Amber, Wash., to succeed A. A. Stricker.

—Dr. Benjamin Ide Wheeler, president-emeritus of the University of California, died at a hotel in Vienna, after a long illness. Dr. Wheeler is given credit for the remarkable growth of the Berkeley institution in California. He had been in poor health for a number of years and had been abroad less than a year.

—Mr. Z. M. Walter, assistant principal of the Grandview Heights High School, Columbus, Ohio, has been elected superintendent of schools at Hillsboro.

—Mr. W. C. Rohleder, formerly superintendent of schools at Hillsboro, Ohio, has been elected superintendent of schools at Grandview Heights, Columbus.

—Supt. John R. Patterson of Athens, Ohio, has been reelected for a four-year term, at an increase in salary. During the summer, Mr. Patterson will teach in the administration department at the summer session of the University of Missouri.

—Miss Minnie J. Nielson, field secretary of the national parent-teacher association, has declined to be a candidate for state superintendent of North Dakota.

—Mr. W. C. McGinnis, superintendent of schools at Revere, Mass., is the first superintendent in Massachusetts to receive a life membership in the National Education Association.

—Mr. S. D. Shankland, secretary of the Department of Superintendence of the N. E. A., succeeds Prof. Henry G. Doyle as president of the Federal Schoolmasters' Club, Washington, D. C.

—The Peoria Teachers' Club of Peoria, Illinois, has elected A. L. Epstein, high-school instructor, as its president.

—William R. Lasher was elected president of the high-school association of New York City for the fifth time.

—When former superintendent of the New York City schools was made the superintendent-emeritus there were no provisions as to just what service he was to render. It is now suggested by Howard W. Nudd of the Public Education Association that he be employed in making a study of the survey of the New York schools, which has just been completed.

—Charles H. Bates retires from the superintendency of the Middleboro, Mass., schools on July 1. Thirty-five applications for the position have been filed.

—V. M. Hardin, high-school principal of Springfield, Ill., was appointed a member of the Greene county textbook commission.

—J. T. Reed, superintendent of Chocktaw county, has been appointed assistant state superintendent of schools of Oklahoma. He will look after vocational training.

—Supt. F. R. Richardson of Spencer, N. C., has been reelected for another year, at an increase in salary.

—Mr. L. E. Grove of Hancock, N. Y., has been elected principal of the junior-senior high school at Norwich, N. Y. Mr. Willard Anderson has been elected as athletic director for the next year.

—Supt. S. G. Reinertsen of Moorhead, Minn., has been reelected for another year.

—Mr. D. R. McDonald of Leman, Mo., has been elected superintendent of schools at Webb City.

—Supt. T. M. Clay of Vassar, Mich., has been reelected for another year.

—Supt. W. A. Pye of Toledo, Iowa, has been reelected for a term of three years.

—Mr. M. C. Murray has been reelected as superintendent of schools of Michigan City, Ind., for the next year.

PERSONAL NEWS OF SCHOOL OFFICIALS

—Owing to criticisms made by the citizens, the school board of New Windsor, Ill., consisting of M. I. Robb, president; A. J. Christy, clerk; Dr. F. J. Rathbun, John P. Petrie, and Alfred Gummerson resigned. County Superintendent John D. Cooke will call a special election.

—A promoter of military training applied to the Madison, Wis., board of education for permission to address the students of two high schools. The board denied the request.

—At McPherson, Kansas, the following were elected members of the school board: B. Harms, Mrs. Stuart Simpson, Mrs. F. G. Quantius, and Lee Miller.

—H. W. Gillette was elected a member at large of the board of education of Jamestown, N. Dak.

—James T. Montgomery, a new member of the Sedalia, Mo., school board, was elected as its president.

—The Springfield, Mo., board of education is deadlocked over the election of a president. Thirty ballots have been taken without result. The candidates are G. G. Lidy and Dr. J. P. Ferguson.

—The school board at Marshfield, Mo., elected E. Bradshaw as its president.

—As the result of a mass meeting held at Foster, Washington, and attended by 500 persons, three directors of school district No. 144 resigned. The trouble arose over the dismissal of Frank Laird, superintendent.

—Mrs. Jewell Null is the first woman elected a member of the board of education of Mexico, Missouri. She defeated Dr. A. C. White, former mayor, and himself a candidate for reelection to the board.

—Mr. Harold Brandenburg and Mr. William Temple have been reelected to membership on the board of education of District No. 390, of the Serena Community High School, Serena, Illinois. This is the seventh term for both men.

—Mr. J. R. Day, member and former president of the school board at Council Bluffs, Iowa, died on April 22, after a week's illness of Bright's disease. Mr. Day was 37 years old and is survived by a widow and four children.

—Mr. S. J. Striegler has been elected assistant secretary of the school board at Brady, Texas.

—After the school board of Osage, Iowa, had determined to cut down outside pupil activities, including attendance at band and orchestra tournaments, two members of the board, Birchard Brush and Herbert Bartlett, resigned.

—Missouri. L. C. Allersmeyer and C. B. Maune were elected school-board members at Union. Dr. R. N. Crews and Prof. Frank L. McCluer were elected school-board members at Fulton.

—Missouri school elections: Union school board, L. C. Allersmeyer, C. B. Maune; Fulton school board, Dr. R. N. Crews, Prof. Frank L. McCluer; county superintendent, J. C. Humphries, reelected; Cape Girardeau school board, E. L. Miller, Edward L. Drum; Tipton school board, A. S. Hays, Edward L. Roth; Jefferson City school board, Mrs. D. C. McClurg, Oscar Raithel; Mexico, Edward C. Offutt, county superintendent, Mrs. Jewell Null; Bowling Green, county superintendent, Mrs. Annie Edie-gram, school board, Edward Gregory, Thomas Sanderson; Sedalia, county superintendent, C. S. Scotten; Moberly, county superintendent, J. V. Minor; California, H. M. Allen, W. L. Byler; Louisiana school board, J. M. Hedges, Victor M. Pitney; Rolla school board, Leo W. Highley, P. H. McGregor.

—Everett Jerrell, a banker of Cape May, was reelected president of the Cape May county, N. Mex., association of boards of education. In addition to the election of Mr. Jerrell, E. J. Rubright, president of the Dennis township board of education was elected vice-president, and C. H. Newkirk of West Cape May was elected secretary and treasurer.

—The two new members of the Indiana state board of education are Mrs. Martha A. Whitacre of Richmond, and Mrs. Beryl E. Holland of Bloomington.

—John D. Lent, Joseph D. Reinhardt, and Joseph L. Linnig were elected members to the board of education of Peru, Illinois, without opposition. The hold-over members are John Henkel, Edward J. Weiland, Edward G. Utz, and John Harding.

—Mrs. Henry Miller was elected school clerk, and John Myers school director, at Merriam, Kansas.

—Stanley Wozniak, member of the Hamtramck, Mich., board of education, was elected president of the department of school administration of the Michigan Education Association.

—Taylor Allderdice is the new member of the Pittsburgh, Pa., board of education.

—The following were elected to membership of the Prophetstown, Ill., school board: President, Harvey C. Hull, Mrs. Clara Baldwin, Elmer Johnson, and Roy Olmstead.

—Mrs. Clara T. Collis and George Hughes of Riverside, and Frank J. Gerlich of Hollywood, were elected members of the Riverside-Hollywood, Illinois, school district.

—Mrs. Bess Wendell is the newly-elected president of the Maquoketa, Iowa, school board.

Remodeling an Old School Building

Arnold Gloor, Superintendent of Schools, Crookston, Minn.

Does it pay to remodel a dilapidated, antequated building provided the foundation and walls are structurally sound? The recent experience of Crookston gives an answer to this question. The Lincoln elementary school in that city has had a strange history. It has undergone almost every operation it is possible to perform on a piece of architecture. The building was erected in 1895 at a cost of $14,710, enlarged in 1905 at a cost of $4,577, moved in 1912 at a cost of $16,377, and finally completely remodeled in 1926 at a cost of $27,712. The total outlay on the building during the 31 years of its history is $63,376.

FIG. 1. LINCOLN SCHOOL, CROOKSTON, MINN., IN ORIGINAL STATE.

Originally the building was intended for high-school purposes. It was built in the form of the letter L. (See Fig. 1.) The annex erected in 1905 changed the shape into a rectangle. (See Fig. 2.) The removal of the building from its original site was undertaken to make room for a modern high-school building. The moving alone cost $7,000, the construction of the foundation and ground floor $6,799, and changes in the heating plant and other details $2,578. After the completion of the new high-school building in the year 1914, the Lincoln building was converted into an elementary school, very few if any alterations being made in the interior. The ground floor, however, continued to house the manual-training department with space for a benchroom, a machine room, and a drawing room. Figure 3 shows the building as it appeared after it was removed to its present site.

FIG. 2. LINCOLN SCHOOL, CROOKSTON, MINN., AS REBUILT.

The board of education soon discovered that a thorough remodeling of the second and third floors of the building would become imperative before many years. The building was an unsightly object with its monstrous exterior stairways, its dormered roof, and its unfinished-brick walls. The classrooms were poorly lighted; the floors, especially in the corridors, inclined from a horizontal position by an appreciable angle, bearing a remote resemblance to a toboggan slide; huge areas of plaster had to be removed from the ceilings from time to time to prevent them from falling upon the heads of the children; and the stairways, doors, and slated walls were all of a kind to complete a picture of all but hopeless dilapidation. To prepare for the inevitable the board adopted the wise policy several years ago of creating a sinking fund to which the sum of $2,000 was added annually. On August 2, 1926, this fund together with the accrued interest amounted to $20,438, which was supplemented by an additional $2,000 in September, making a total of $22,438. The creation of this fund made it unnecessary to call for a bond election to finance the remodeling project which was undertaken in June. Without any increase in the tax levy, the $5,414 balance, not covered by the sinking fund and carried as a floating debt, will be wiped out in the course of three years.

Mr. E. F. Broomhall of Minneapolis served as the architect. The general contract was let to John Becker, a local contractor. The building was completed late in the fall and is occupied. That it has undergone a striking transformation is obvious from a glance at Figure 4. The dormers have been removed from the roof and the wooden shingles replaced with asbestos. The old wooden stairways in the front and rear are no more, one of them having given way to a solid concrete structure. The walls have been stuccoed and pebbled so that they conform in color with the adjoining high-school building. The windows have been changed so as to furnish unilateral lighting for all the classrooms. The new interior stairway has been transferred to one side, providing much more commodious corridors. Every wall and partition has been relathed and replastered. New maple floors have been laid in all the classrooms and composition floors in the corridors and stairways. Each classroom is provided with a unit ventilator for ventilation purposes. Fireproof composition blackboards with an upper display border of cork carpet have been installed. All the woodwork has been refinished. The building has been rewired and furnished with new electric-light fixtures. Very few alterations were made on the ground floor, but the walls and woodwork were renovated. In short, the building has been transformed beyond recognition and has been made to conform with modern standards of school architecture.

FIG. 4. LINCOLN SCHOOL, CROOKSTON, MINN., AS IT IS AT PRESENT.

The building comprises six regular classrooms with ample wardrobes, a physical education room, an office, a kindergarten room, and a spacious room to be used for storage purposes and as the janitor's quarters. The high-school manual-training department occupies the ground floor. The building is heated from a central heating plant.

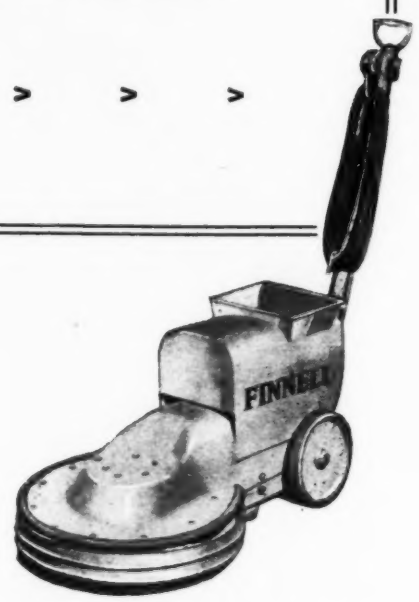
FIG. 3. THIRD STATE OF THE LINCOLN SCHOOL, CROOKSTON, MINN.

The cubic contents of the building is 243,477 cubic feet. To erect a new building of this size, figured on the conservative basis of 20 cents a cubic foot, would cost $48,695, as against $27,712 for remodeling. The remodeling cost per cubic foot is 10.9 cents. As the building now stands, it should give as many years of satisfactory service as a new structure. The investment, therefore, appears to have been a wise one.

The experience of Crookston is one from which other small cities with limited resources and antequated buildings may be able to profit.

—Minneapolis, Minn. The school board recently adopted a recommendation of the committee on graduation providing that the use of class rings and pins be discontinued, that commencement announcements be eliminated, and that the price of flowers be limited to $1.50 for each girl.

Give *your* school a new "*floor-complexion*" this summer > > >



TRAMP, tramp, tramp . . . All year, day in and day out, the school floors have been taking their punishment bravely. But now that summer vacation is here, they look forward to a complete rest. But you can do more than just let them rest in their present condition. For there is an easy, inexpensive way in which your janitor, without the aid of outside help, can completely refinish them at a trifling cost — which actually turns out to be a splendid investment.

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In the case of linoleum, rubber and cork floors, the FINNELL first scrubs them spic-and-span, then waxes and polishes them to lustrous beauty. Their life and utility are prolonged by this treatment.

Terrazzo, tile, mosaic, marble — the FINNELL enhances their natural beauty, scrubs them free of incrustations, thoroughly removes the dirt lodged in crevices, prevents discoloration, increases their period of beauty and usefulness.

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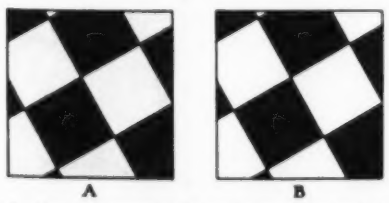

A B

A—Section of a supposedly well-cleaned school floor. Incrustations and dirt in crevices have failed to yield to hand methods. Discoloration has set in.

B—After scrubbing with a FINNELL. This test on your floors will reveal how much cleaner and more attractive they *can* and *should* be!

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Back slats adjustable; Height and tilt of top adjustable; Top Leveling Device.

Large—$4.95; Medium—$4.80; Small—$4.65.

Dovetailed hardwood drawer A $1.50; Book Drawer with steel sides and bottom B $1.15; Swinging flush top ink well 15c.

The greatest announcement during this school generation. Send for catalogue and list of over two thousand users.

The 24 points of a perfect desk as decided by Prof. C. A. Anderson of Stanford University and his Committee of over a score of leading educators are all possessed by the Columbia. (See July, 1924, issue of American School Board Journal. A reprint will be sent on request.)

INDESTRUCTO'S POINTS.

1. Seat of proper height.
2. All corners rounded.
3. Seat saddled to fit body.
4. Seat of proper width.
5. Seat tilted higher at front.
6. Back tipped backward slightly.
7. Back curved to fit body.
8. Back adjustable in height.
9. Back of solid quartered oak.
10. Seat extends slightly under top.
11. Desk height adjustable to child.
12. Desk slant adjustable.
    11 and 12 constitute a Tilting Top.
13. Curved front feet give same strength and effect as separate support.
14. Desks easily moved for sweeping.
15. Noiseless, no hinges or swivels.
16. Arm rest extended backward.
17. Simplicity—Examine illustration.
18. Durability—Indestructible steel.
19. Finish, dull, lasting quality.
20. Flush top inkwell, noiseless, removable.
21. Box or sliding drawer.
    May be used on either side.
22. Nothing to catch dirt.
23. Pencil groove on top.
24. Top leveling device.

COLUMBIA SCHOOL SUPPLY CO.

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NEWS OF THE SCHOOL BOARDS

DISTRICT VERSUS REPRESENTATION AT LARGE

The members of the board of education of Milwaukee, Wis., are elected at large. A bill now before the Wisconsin legislature seeks to elect the Milwaukee school board by assembly districts instead of at large as at present; it gives Milwaukee seventeen school directors instead of fifteen; it provides for four year terms instead of six-year terms; the entire board will be elected at one time instead of providing for holdovers as at present; it sets the election at the same time that aldermen and supervisors are elected instead of at the time of judicial elections as at present.

The City Club of Milwaukee, defines the scope and function of the school board by holding that it determines upon policies only and that it is the function of the superintendent and his staff to carry out these policies and to administer the schools under the board's general direction. The Club adds:

"The proposed district system which is the system of small territorial representation with one or more schools in each district will encourage each director to consider the schools, principals and teachers in his district as 'his schools,' 'his principals,' and 'his teachers.' The tendency will be for him to seek to control the appointments of the teachers and principals in that district. Looking upon the district as his little domain, he will take up complaints of parents on matters of minor classroom discipline and the professional control of teachers and principals in their work will be invaded by a non-professional authority. The history of ward representation of previous years in Milwaukee in school affairs bears this out.

"The functions of the superintendent and workers should not be encroached upon by individual directors."

It contends further that "It is the natural inclination for a representative of a small part of a large political unit to consider the interests of his constituency regardless of the interests of other sections of the unit or the unit as a whole.

"It is easily possible, and, in fact, very likely that with this system of representation considerable difficulty would be experienced in the carrying out of a comprehensive school-building program, for each director, with the thought of currying favor with the voters toward the coming election, would hold up the program until, with little regard to the actual need therefor, it included a new building for his district. The school problem of the city is one problem and not seventeen. With one eye turned to the next election, the school director under the district system will be very apt to subject himself to considerations of purely local influence."

THE INFORMED MEMBER OF THE SCHOOL BOARD

The value of information on school matters to members of the board of education is discussed in a suggestive editorial in a recent issue of the Utah *Educational Review*.

The school board heads the school district. One of these boards in Utah consists of ten members, all the others of five. As a whole these members are civic-minded individuals who endeavor to magnify their important tasks to the best of their abilities. They set aside little jealousies, petty personal ambitions, and the like and aim to function on high planes of thought and action. Nearly all seem to realize that it takes more than simply an election to make a real, worth-while public servant and that merely because a man received the majority vote is no guarantee he is fitted to pass judgment on educational problems without serious study. An attitude contrary to this is suggestive evidence that the man is not used to study, does not weigh evidence, is cocksure or else indifferent, and is not properly seasoned for any important public position. Unless he is intellectually hidebound, he must feel decidedly uncomfortable at a board meeting with those who habitually read school magazines, study educational problems, keep abreast with progressive movements in education, and who thus prepare themselves to pass intelligent judgment rather than prejudiced opinions on vital questions coming for their deliberation and action.

What a board member reads predicates very largely his conversation and actions and, on the other hand, what he says and does are almost certain indexes of the amount and nature of his reading. In view of this no school-board member can afford to refrain from reading current educational literature and becoming informed in regard to pressing school matters. He owes this to himself, to other board members, to the boys and girls, and to the citizens who expressed confidence in him when they elected him to the board.

PORTLAND CHANGES ITS ORGANIZATION

The board of education at Portland, Oregon, has completely changed its plan of organizing the schools by adopting the unit plan of management and discontinuing the multiple plan which had been in existence since the school district was organized. The following taken from the report of Mr. J. A. Zehntbauer of the educational committee of the Portland board, outlines the plan quite completely.

Instead of having the heads of departments report direct to the board of school directors, appoint the superintendent of schools general manager of the school district's business. Require him to organize a group consisting of heads of departments such as the superintendent of properties, the school clerk, assistants to superintendent of schools, and other employees of the district whom he may consider necessary to this body. In his absence the chairman of the school board shall appoint another member of the managing committee to act as chairman.

It shall be the duty of the chairman of the managing committee to call a sufficient number of meetings before each regular school-board session to bring before this committee all matters pertaining to the business of operating the schools and have them passed upon by this body and presented to the school board as recommendations of the managing committee.

In order that the school board may know who makes each valuable suggestion, all recommendations coming from the managing committee must be in the following form:

Mr. Jones recommends through the superintendent of properties that the district install underground pipe sprinkling system in lawns that are to be sprinkled in the future as statistics show the savings to be as follows:

(A statement showing principal reasons for the decision.)

Suggestion approved by the superintendent of properties and recommended to the school board by managing committee.

Suggestions of recommendations may come from any source through the superintendent of properties, the school clerk, or the superintendent of schools, but must come to the managing committee with the approval or disapproval of the head of

(Continued on Page 104)

What a Teacher Told the President of the Board

President of Board: Good morning, Miss Mitchell.

Teacher: Good morning, Mr. Moore. I have called upon you today to talk to you about the introduction of some new teaching methods and materials in our school.

President of Board: I am very glad, indeed, to have you come and talk to me, Miss Mitchell. Every member of the Board is eager to get suggestions from our teachers. We want to do the most we can for the children of our schools. Go ahead, Miss Mitchell, and tell me about these new things.

Teacher: You know that it is hard for a teacher to reach every child. Some children learn very slowly, as you know. Often they are left behind. I believe many of them could be saved if the teacher just had time to help each one. How I pity such a child! Often I pause to help him. But how long it takes! While one child is being helped the other children all grow weary and restless, and their time is wasted.

When I try to make the work easy enough for the average child of the class, the brighter ones are bored. At the end of a day I often feel discouraged. Other teachers tell me that they have the same kind of experiences.

How much more discouraging for our teachers who have two or more grades in one school! What a time I had when I taught every grade, from the first to the eighth, in one room!

No more of this dark picture, Mr. Moore. Let me tell you about something I have found to help me in my troubles, and to help the scores of other teachers in our schools.

It is called **Self-Teaching Methods and Materials.** Some call it Modern Seat Work. Others call it New Methods and Materials in Individual Instruction.

President of Board: The new materials that you talk about are not just a whole lot of theory, then?

Teacher: No, Mr. Moore. There never was anything more practical. I have a friend who travels all over the United States. He says he hears about these wonderful publications everywhere. Teachers are wild about them. Some of us teachers have spent our own money for them, just because they will help our children.

Of course, I know that our superintendent does not want the teachers to buy books and materials out of their own salary.

President of Board: Of course not, Miss Mitchell. Go on and tell me more about these new things.

Teacher: The child teaches himself with these new materials. He works as fast, or as slowly, as he likes. If he is in the fourth grade, say, and can read no better than a second grade child, or if he is a grade back in his arithmetic, he can work alone at the kind of reading or arithmetic which he can do well and enjoy doing. Everybody likes to succeed. There is nothing so discouraging as to work at something too hard. On the other hand, nothing is so thrilling as success. When a child can do something well, he feels like doing something more; he feels he is somebody.

Where the self-teaching units are employed, every pupil can be set to doing what he can do well. Then, no matter how children differ in ability in the same grade, or how many grades there are within the same room, each child can be stimulated to move ahead, at his own speed. Each one can be led to do his best.

President of Board: How is the new material made up?

Teacher: The lessons are printed on cards, which come in packets of 16 to 32 cards. On each card is printed directions to the pupil. As he reads these directions he teaches himself! Also there are printed answers. Against these the child can check his own work and know when it is correct. The child, therefore, not only teaches himself, but tests himself. He learns independence, and he enjoys the work because it makes him feel he is somebody.

President of Board: This all sounds very well, Miss Mitchell, but I am wondering what the teacher will have to do. How is she going to earn her money? Are you trying to find an easy job for her?

Teacher: Oh, no, Mr. Moore. She will work just as hard, but her efforts will amount to more. These new methods and materials will help the teacher, and help the child to help himself. If a child is poor in Reading, he can help himself to read better; if his English composition work is hard, he finds aid for self-improvement; if he has trouble in Arithmetic, he can help himself to climb over the hard places. Several children can work together helping one another. As a result each child learns initiative and independence, and he learns to cooperate happily with his classmates.

The teacher will have time to assist the slower child until he can enjoy success, and she can stimulate the brighter one to use his "brains". She will train in independence. I believe these methods and materials, then, will aid in building character. Don't you?

President of Board: Yes, I think you are right, Miss Mitchell.

Teacher: The teacher who has such material to help her will have time to plan interesting recitation periods. She will have more time to be human.

Do you know, Mr. Moore, that we teachers are so busy now that we sometimes treat our children like so many cogs in a wheel? When they come early in the morning we are so busy writing lessons on the blackboard that we have no time to talk to them. During the day it is such a mad rush, that the child hardly finds a heart in us. I would like to have enough time to be really human with the children, so that each would feel free to tell me of his joys and sorrows, of the new baby that has lately come into his home, and of grandmother's rheumatism. But if I stopped to listen, when would I get all of my work done?

President of Board: I am glad you are so much interested in the child as a human being. When I was a boy in school, I could always learn easily from the teachers who cared for me, and who made me feel that I was worth something.

But, Miss, Mitchell, how would these new materials help make you more human?

Teacher: You see, Mr. Moore, that it takes a lot of time to make up lessons, and when a teacher arrives at school early in the morning she must spend a long while writing lessons on the blackboard. She gets nervous, sometimes, because she fears she will not finish before school time.

Now, some children like to come to school early. They like to help one another; visit with one another, and they like to visit with the teacher. But she does not have time to talk to them. If they ask her a question or begin to tell her of their joys and sorrows, she has no time to listen to them. She may, indeed, be annoyed by them, and if they talk a little loud to one another, she may command them to keep quiet. Many teachers, just to protect themselves in the morning while they are very busy, make the children who come early take their seats quietly and remain as still as if it were school time. To keep them still she may make them work problems which she had copied on the board. So she has to do more work to keep the children quiet, that she may do still more work. Many children quit coming early. They would rather stay away as long as possible, than to do more work that is uninteresting, and be considered as a nuisance.

President of Board: But Miss Mitchell, is it not a good thing for the teacher and the pupils to be busy?

Teacher: Certainly, Mr. Moore, but while they are busy they should be busy at the thing most worth while. When you are busy doing what you feel is very important, you not only enjoy such work, but you get more done; and the more you work, the more you want to work. So with the teacher. She has all these children in her care. She thinks of so many things she wants to do for them. She would like to prove her personal interest in them. But how hopeless it has been!

Think of the children!

They find no urge in things just because they are told to do them. Merely to go through the motions of work and to spend hours and hours, has no lure for them. Therefore, they learn to loaf and to slight their work. Indeed, they may learn to hate the very things we want them to love. If, on the other hand, they feel that what they do is well worth doing; if they feel they are considered as personalities for whom their teacher cares, and if they can be led to enjoy the thrill of success, school takes on a new attractiveness.

President of Board: But, Miss Mitchell, what about the poor teacher? You, of course, can use these new things very well but you are well trained. You know some of our teachers have not been so well trained and some of them are not so much interested in their children as you are.

Teacher: The fine thing about these publications is that any teacher can use them. She does not need special training. Everything is written in the book and on the packet telling her just what to do. On each pupil's card there are directions also, which are so plain and simple that he can work alone. These lessons help protect the child against poor teaching. They give the teacher many samples of good teaching. The best thing our Board of Education can do to improve our teachers is to put into their children's hands these new materials.

President of Board: Suppose the teacher has a very large class. Can she use the new exercises in a class of forty children?

Teacher: The larger the class the more useful these materials will become. The teacher using them can have part of her children teaching themselves as she works with the rest of them or, all the class may be working at these self-teaching lessons, while she goes among them giving individual guidance. These new publications make the teacher an effective director of self-help, instead of a questioner and a corrector of mistakes. The increasing size of classes will not be complained of so much where these new methods and materials are employed.

President of Board: Please tell me more about the time saving qualities of these new materials.

Teacher: When the pupils use these cards they do not need to copy from the board. Some teachers beg for more blackboards. I do not want more blackboard. I want something better. I want the modern Seatwork which I have described to you. Then I will have time to guide my children individually and to encourage them to work with greater joy and more effectiveness.

President of Board: That would be wonderful, but such good things must cost a lot of money, and you know that our Board is economical.

Teacher: They are not expensive. The self-teaching exercises help save money. That is the most wonderful thing about them! You know that the teachers have been begging you to buy more supplementary materials in Reading, English, and Arithmetic. You know, Mr. Moore, how expensive it is to buy a book for each child. But this new self-teaching work is printed on cards. From sixteen to thirty-two children can be working on one unit at a time. Then, for the price of forty cents a whole class of children can teach themselves over a period of several days.

Besides being very economical this material is more interesting than a book to the children. He who has the same bock a whole term finds it growing more and more unattractive. But the child who uses these materials is always getting something new. It is all so different from the text-book, that children are excited about it. My children will do any kind of hard work, if they know they have awaiting them a packet of these exercises. Come around some day to see them.

President of Board: That is just the kind of thing we have needed all these years. I am sure our board will be happy to appropriate some money for such wonderful materials for our children. What pleases me so much is that this is such a money-saver. We must try to keep our expenditures down, you know. I think it is fine that you teachers think of that also.

Teacher: I believe that every teacher should be interested in saving public money. I believe that the children who use these new materials will see that we are saving money for their parents, and the parents will be proud of the Board of Education that can spend public funds so wisely. Think, too, Mr. Moore, of the blessing of these new things to the children. After all, every one of us puts the children first!

President of Board: I am very grateful to you, Miss Mitchell, for all this information. I wish we had more teachers like you. Whenever you have a new idea for improvement of our schools, do come in to see me.

Teacher: The publishers of these materials have something else. They seem to be very unusual. They have a new kind of text book for the child. You remember how dry and uninteresting the arithmetic book was which you had when you were a boy in school?

President of Board: Yes, I remember those dry problems about yards of cloth, pounds of sugar, birds and sheep. The birds always were flying, or sitting on a tree, and the sheep jumping from one field into another. John and Mary and Frank were the only names we heard or read. I hated to read such problems, and when my teacher read one for us to work at the board I used to ask myself: "Is it add, subtract, multiply, or guzinto?" I never did know. I guessed—except when I looked over to see what Charley Fritz had done. How I hated my arithmetic!

Teacher: Nearly all arithmetics are still as bad and dry as yours was. But, Mr. Moore, here is one that reads like a fairy tale. A friend sent one to my seven-year-old nephew for a Christmas present. Imagine a child getting an Arithmetic as a Christmas present! Well, that boy abandoned his gun, electric train, and other toys, to read and chuckle over the stories and pictures in that book.

It is called "My Work Book in Arithmetic." The author is Garry Cleveland Myers, Ph.D., of the Cleveland School of Education.

When my nephew had looked at some of the problems he started working in the book. There is a place right in the book to do all the work. He can keep all his work in it until he is grown up. Because it is permanent, and because the child writes in the book, he will work carefully and neatly. The book costs only forty-five cents, and the child needs no extra pad. It costs as much as that for the paper a child uses for his arithmetic work in one term. That boy would work at this book an hour at a time. No one asked him to do so. It was fun for him. All the things a good teacher would tell the child at each step are printed right in the book. The child needs no teacher. He could teach himself arithmetic if he were a Robinson Crusoe all alone on a distant island. He is shown how to check his own work, too. He knows just what to do, how to do it and when it is done well.

This Work Book in Arithmetic is a picture book, a story book, and a fact book all in one. Nothing else in all the world is like it.

Wonderful to relate, the child learns to be very careful. He is shown how to keep from making errors.

President of Board: That is a good point. So many of our children never learn to even add correctly. The business men are always telling me that our schools should teach our children so they do not make so many errors. I have never been satisfied with our schools on this point. I'm for any book that teaches children accuracy. Our whole Board is very greatly interested in this matter. What is the name of that publishing firm?

Teacher: The Harter School Supply Company, Cleveland, Ohio.

President of Board: I'll send for a copy at once and show it to the other members of the Board. My boy needs it too. He does miserable work in arithmetic. I don't want him to have the trouble which I had when I went to school. Does the firm have anything else?

Teacher: Oh, yes; they have Work Books in History for the elementary grades, also Work Books in History, General Science and Algebra for the high school. I am sure these are just as wonderful as the Work Book in Arithmetic.

President of Board: Do you know, Miss Mitchell, I have just been thinking that all these good things you have been telling me about would solve many a problem of discipline? Of course, you never have any trouble managing your children, Miss Mitchell, but many of our teachers do have trouble. Every now and then a case comes up before our board. Of course we always have to stand back of the teacher, but if she can make the work interesting enough for the children, they will not get into mischief. Some teachers just don't seem to have the knack of getting along with certain kinds of children. How such teachers would be helped if we can put into their children's hands the kind of books and lessons you have described to me!

Teacher: You are quite right, Mr. Moore. There is no problem of discipline where children find the thing they like to do, and can do well. If our Board were to put these wonderful work books and self-teaching units into all our schools, we soon would cease to hear about bad boys.

I know children in a certain school who used to be driven to school, who used to run away every time they got the opportunity, but who now are the first to arrive at school in the morning. It is surprising what a change the Harter Publications have made in these children.

President of Board: I am going to write the publishers at once to send a catalog of everything they publish, so that I can show them to the other members of the Board. Thank you again, Miss Mitchell.

Teacher: You are very welcome, Mr. Moore. Good bye!

(Continued from Page 101)

one of these departments and must come to the school board through the managing committee.

It shall be within the power of the chairman of the managing committee to call into his office for consultation any employee or group of employees of the school district. Any and all changes in business procedure or personnel in all departments must be approved by the chairman of the managing committee.

The school board may refer any recommendations submitted to it by the managing committee to board committees for further investigation, and these will make their reports directly to the board.

Under the new system the plan eliminates independent action by individual members of the board of education and reduces all business officials to subordinate positions under the superintendent.

AMONG BOARDS OF EDUCATION

—New Albany, Ind. Seven hundred high-school students went on strike April 25, as a protest against the failure of the school board to reappoint Charles B. McLinn, principal of the high school, and Miss Alice Funk, teacher of botany, both of whom had taught for twenty years or more. Parents supported the students in their demand for recognition of the long service of the teachers.

—Cleveland, Ohio. The school board is completing plans for the new school-headquarters building. The building will be a six-story structure housing the administrative forces of the schools and the teachers' extension and meeting facilities. The new structure will become the adult educational center of Cleveland and the meeting place for all teachers under the board's jurisdiction.

—Brookline, Mass. The school board has proposed increases in salary for all the janitors in the schools. The schedule is as follows: First class, from $35 to $36 and from $36 to $37; second class, from $31 to 32; third class, from $28.50 to $30. The schedule means an increase of $24.50 in the weekly payroll, or a total of $963.67 for the current year.

—St. Louis, Mo. The school board has been reorganized with the election of Arthur S. Werremeyer, Dr. D. C. Todd, Mr. Henry P. Schroeder, and M. A. Rollins as members for six-year terms. Mr. Ben Weidle was elected president, and Mr. Arthur A. Blumeyer, vice-president of the board.

—Lansing, Mich. A bitter school-board fight featured the April election but interest in the contest failed to bring out a large vote. Four present board members were reelected by a two-to-one margin, the winners being E. P. Teel, R. W. Cooper, Spencer Kelley, and Mrs. F. E. Mills.

—School-board members in Michigan would be subject to removal under power of the governor, according to a bill passed by the state senate and sent to the house for approval.

—Suit for $93,000 has been filed by three banks against the board of education of District No. 6, which controls the city schools of Murphysboro. The suits are to recover funds on warrants of indebtedness which have accrued for several years. The banks concerned took over the obligations of the board and accepted warrants as records of acknowledgment. The First National Bank claimed $21,000 due; the City National Bank, $53,000, and the Citizens State and Savings Bank, $19,000.

—Bucyrus, Ohio. The school board in March was obliged to borrow $9,162 in addition to a $60,000 loan to meet the current expenses of the schools. The loan was necessary to meet bond and interest payments.

—Kansas City, Mo. A controversy between 200 school patrons and ministers and the board of education on permitting dancing instruction in the schools recently ended in victory for the opponents of the plan. The board after a study of the plan rescinded its former order permitting the parent-teacher association of the Westport High School to offer dancing instruction in the gymnasium. The decision is based upon a rule that "the purposes for which buildings may be used shall be such as are not likely to lead to or provoke division among patrons along political or religious lines."

—Fall River, Mass. By a vote of the school board, the name B. M. C. Durfee High School as applied to the Durfee building and the Technical High School has been eliminated. The organization will in future be known as the Fall River High School. Objections to the proposed change were made by officers of the Durfee alumni associations and other graduates of the school.

—That the ends of efficiency are best served as a rule by making the business manager a subordinate of the superintendent of schools was the subject of an address delivered in Columbus before the school business officials, by Mr. A. L. Heer of the Michigan State Normal College. Mr. Heer's proposal met with little favor among the business managers, though it aroused much discussion.

—The board of education of Worthington, Minn., was severely criticized by the *Globe*, a newspaper of that city, for advertising in a Cincinnati religious publication for five applicants in the local schools. The advertisement stated, "only members of the Church of Christ need apply," according to reproduction of advertisement in the local newspaper.

—Waltham, Mass. The city council has adopted a resolution rebuking the school board for exceeding the appropriation for schools last year. The action was the result of the request of the superintendent for an appropriation of $9,100 to meet the excess in expenditures for 1926.

—The Boston Schoolhouse Commission has been required to furnish safety devices for window cleaning in school buildings. The order was issued as a precaution against accidents to janitors.

—Chicago, Ill. The board of education has taken the first steps toward an increased income for the schools, exclusive of building and other programs. A referendum vote on increasing the tax rate from 1.5 mills on the dollar, to 2.42 was asked in a resolution. The question will be voted upon at the June election.

—Prof. Charles B. McLinn, principal of the high school at New Albany, Ind., on April 27, led the student body back to its studies. The students had been on strike for two days in protest against the board's refusal to reappoint the principal for another year.

—Marion, Ohio. A survey of the buildings and equipment of the Marion schools has been completed by a group of experts from the Ohio State University.

—Topeka, Kans. The board of education has cooperated with the city officials in the erection of traffic signs near school buildings. About one hundred signs will be erected at a cost of $2 each.

—Maumee, Ohio. Under a new rule of the school board, peddlers and canvassers have been prohibited from entering the school buildings. Only regular school-supply salesmen will be given access to the schools.

—Chicago, Ill. The Citizens' Public Education Commission is a new organization which has been formed for the purpose of cooperating with the city authorities in promoting the interests of the Chicago schools and in eliminating the bickerings and jealousies which have occurred between the municipal authorities and the school board.

The commission will work with the city authorities in working out a constructive program for the selection of high-minded men and women for the school board, and will give assistance in the improvement of the educational system.

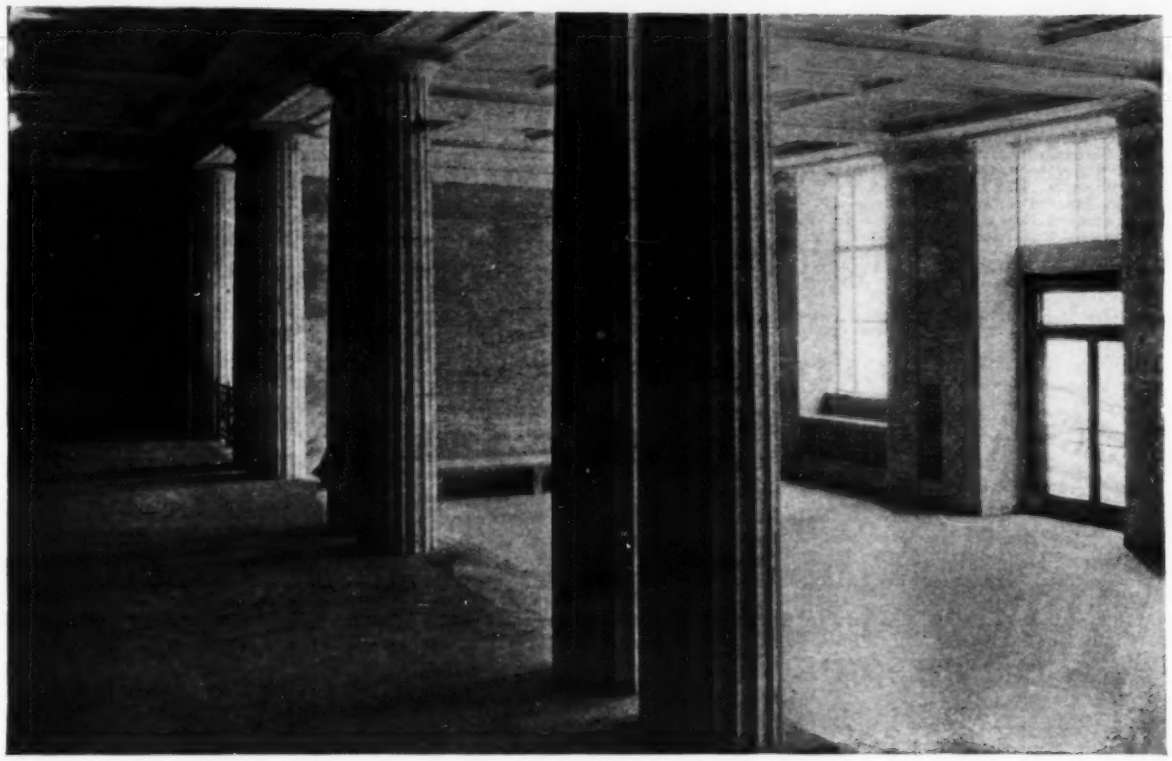
—Madison, Wis. The board of education has reorganized with the election of Mrs. J. W. Madden and Mr. Glenn W. Stephens. Mrs. Madden succeeds Mrs. William Kittle, and Mr. Stephens fills the unexpired term of Mr. C. E. Blake.

—Dr. A. H. Bressler has resigned as president of the school board of Manhattan, Kans., after a service of twelve years. During Dr. Bressler's administration, the school plant was enlarged, and the teaching staff was increased to meet the present-day requirements. Mr. W. H. Andrews has been elected president to succeed Dr. Bressler, while Mr. C. D. Middleton becomes vice-president, succeeding Mr. Andrews. Mr. Hal McCord is the new member on the school board.

—Topeka, Kans. The school board has created a separate treasury department in the administration building, with Miss Elizabeth Donaldson in charge.

—The Wisconsin assembly has refused to pass down a bill of Albert F. Woller of Milwaukee, which provides for the election of members of the Milwaukee board from assembly districts. The bill seeks the elimination of the present system of election at large. Under the proposed law the socialist representation on the board would be increased by three members.

(Concluded on Page 196)



One of the EVERYDAY USES *of* MARBLE

Of Course, There Are Imitations, But—

IMITATIONS of marble—those manufactured products claimed to be "almost as good"—serve only to emphasize the matchless and incomparable standard of marble. All of them recognize marble as the ultimate.

Genuine marble is unmistakable—in its beauty, its gleaming depth of surface, its veining and coloring. It is alive . . . vibrant with vitality from Nature's own laboratories. And its ultimate cost is no more than the average lifeless imitation.

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NATIONAL ASSOCIATION *of* MARBLE DEALERS

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There is No Substitute for Marble

(Concluded from Page 104)

—St. Louis, Mo. The school board has voted to curtail the summer schools and to reduce the salaries of teachers and principals of these schools by twenty per cent. The reductions will effect a saving of approximately $250,000 in expenditures.

The action will reduce greatly the attendance this year at both the high and elementary summer schools. The restriction does not apply to the Harris and Summer teachers' colleges nor to the special schools.

—Springfield, Mo. Judge G. G. Lydy has been elected president of the board of education, ending a deadlock of fifteen days' standing in which 67 ballots were taken.

—The school board of Salina, Kans., has distributed literature in the form of cards which is intended to encourage caution on the part of motorists in protecting children from automobile traffic. The cards bear the caption "A child's life is surely worth sixty seconds." The cards are placed on the windshields of automobiles and have been distributed all over the city and county.

Another precaution is the erection of traffic-warning signs bearing the inscription "we love our children, drive slowly" in the vicinity of four school buildings. The signs are painted black, with red lettering, and are outlined with silver paint.

—Santa Ana, Calif. The board of education has created a new committee on rules and regulations. The committee which is composed of Dr. J. D. Ball and Dr. R. S. Horton, will have charge of matters relating to the publication, execution, and enforcement of administrative policies and office orders, which are issued in the form of formal resolutions or administrative orders by the president, the city superintendent, or the business manager.

The board has taken steps to compile a new pamphlet comprising the rules, regulations, and orders now in force for the use of teachers, principals, and members of the administrative staff.

—At Port Huron, Michigan, a recall of three members of the board of education, Mrs. Jennie B. Pilkey, John W. Fead, and Roy B. Kemp, is being circulated for signatures. It is based upon the charge of partisanship and neglect of duty. The members deny the charge. Mrs. Pilkey threatens to fight the case in court.

—At Superior, Wis., where a disastrous school strike took place, keeping 1,000 school children on the streets for a whole month, a petition signed by 2,666 citizens asking for an elective school board, has been filed with the city council.

The school committee of Brookline, Massachusetts, recently engaged in an executive session, believing that it was unwise to make the deliberations public. Thereupon the Brookline *Chronicle* said: "The whole proceedings indicated that at least a majority of members of the board have a gentlemen's agreement not to oppose or question any request to take matters up in private, either because they fear to let the townspeople know how they stand on questions of vital importance in the administration of local school affairs or are determined that the taxpayers who finance the local educational system shall not know the pros and cons of the issues involved, this despite the fact that they are elected officials."

—Cleveland, Ohio. The board of education has been asked to consider the erection of a six-story administration building. Half of the proposed building would be given to departmental offices, and the remainder to vocational training.

—An opinion rendered by the state educational department of Wisconsin is to the effect that "A school teacher is not exempt from the provisions of the attachment statute because he is a teacher. He is subject to garnishment as a public employee and no exemption from debt will be granted by a court because of his profession."

—A bill providing for teachers' tenure was recently defeated by the Ohio legislature.

—The school board of Rochester, N. H., raised the salary of Supt. William H. Baker from $3,500 to $3,700. The salaries of five school principals were also raised. The board ordered that no particular publicity be given its action. Indignant over the fact that no raises were provided for the teachers, they filed a protest, setting forth the fact that the length of the teaching day had been increased 15 minutes, one week of sick leave had been taken from each school year, the sizes of classes have been increased, and teachers of overcrowded rooms, who formerly had assistants, are now compelled to do without, and asking for the same increase received by the principals.

—Miss Anne J. Farley, principal of public school No. 183, New York City, has rounded out fifty years as teacher and school executive. The event was celebrated by a luncheon meeting at the Hotel Astor with distinguished educators present. Mrs. Annie Lawrence Dias Thomas, who has taught school for fifty years, was greeted by her pupils and a large body of teachers and congratulated upon her life's work.

—The school board of Mansfield, Ohio, has ruled that the high school swimming pool is for the exclusive use of pupils only. Outside persons will in future be barred.

—Alfred A. Benesch, member of the board of education of Cleveland, Ohio, has introduced a plan whereby all the local schools are to be named after world-famous leaders. He urges that the Rawlings junior high school be named the Louis Kossuth junior high school, in honor of the famous Hungarian leader.

—New York, N. Y. Teachers who marry during the school year, and who absent themselves from school to take a honeymoon trip, will be brought to trial for neglect of duty, according to a recent circular sent to all schools by Supt. William J. O'Shea.

—The school boards of Houston and Fort Worth, Texas, have refused to comply with an order of the fire marshal to equip fireproof school buildings with fire escapes.

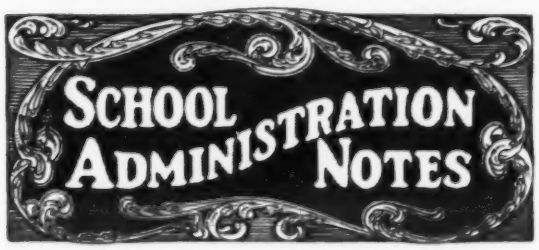
—The school authorities of Lynn, Mass., have occasionally rented their halls and gymnasiums to outside parties. A legal opinion has recently been obtained to the effect that the school authorities will be liable in case of injury through accidents.

—St. Louis, Mo. The school board has adopted a resolution providing for the establishment of a retirement fund for St. Louis school teachers. Under the resolution, the legislature will be asked to pass a law providing for an amendment making provision for the fund.

—The board of education of the village of Elmont, town of Hempstead, Suffolk, New York, has passed a resolution requiring teachers and school employees to pass an annual physical examination for determining their physical fitness.

—One-teacher schools in Charleston County, S. C., have been reduced in ten years from 26 to three. Substantial brick buildings have replaced the inadequate buildings of past years, and transportation of pupils is universal in the county.

A student loan fund of $25,000 has been established in connection with the new Bolton High School, Alexandria, La., by a gift from the president of the Rapides Parish school board for whom the school was named.



FUNCTION OF COUNTY SUPERINTENDENT OF SCHOOLS

The strategic power in rural education is in the hands of the county superintendent of schools, according to a statement issued by the United States bureau of education. It says:

"The rapid changes in American life have thrust new responsibilities on the superintendent as well as on his teachers. He still retains the clerical and financial duties assigned when the office was established. New developments in educational ideals and new appreciation of the importance of the professional administration of schools, the growth of a scientific attitude toward education, and the application of the results of scientific experimentation to school organization and methods of instruction have revolutionized our ideas concerning the selection of and the responsibilities which should be ascribed to this officer. The county superintendency is now considered the strategic position in the reorganization and improvement of rural education. The office demands a person of ability and professional training and experience equal to that of other responsible educational positions. In 38 states county superintendents are the supervisory officers for the rural schools of the counties and have certain administrative responsibilities varying in degree in the different states.

"In New England the supervising officer is the town or union superintendent. One state has also 'supervising agents.' In New York the rural superintendents are called 'district superintendents' and supervise a section of a county. In Nevada they are deputy state superintendents and supervise one or several counties. In Virginia they are division superintendents, and in many cases the division and the county are coterminous.

Selection Important

"In Delaware there are no county superintendents, but state officials assume duties formerly assigned to the county superintendent. The term of office of the rural superintendent is four years in 18 states, two years in 16, and varies in the others. In 25 of these states the county superintendents are elected by the people, usually in the same manner as other county officers; in others they are appointed by boards; in New Jersey and Virginia they are appointed by the state board or state chief school officer.

"The system of electing county superintendents at the regular political election partakes of those weaknesses indicated in discussing the office of the state chief school officer. Cities no longer select their superintendents by popular vote. Experience has taught them that an executive officer for such a position should be carefully selected by a responsible board in a manner similar to that in which boards of directors of business organizations select their executive officers. Although many competent superintendents are found under the elective system, it is on the whole an unsatisfactory method of selecting school officials. Political affairs consume the time and influence the action of officers elected in this way; tenure is uncertain and short; the officer must be a resident of the county, even though a better candidate could be secured if selection were made from a larger territory.

"The powers and duties of the county superintendent should be practically the same as those of the city superintendent of schools.

"He is the executive officer of the county board of education and administers under its legislation the educational policies determined by it.

"He is the chief educational officer of the county and is primarily responsible for the conduct of the schools as their professional leader.

"It is his duty to make recommendations relative to the location of schools, the number of grades required, the type of building, and equipment, etc.

Duties Are Outlined

"He selects supervisors, principals, and teachers for the schools, which appointments are formally approved by the school board.

"He supervises the teaching in all schools under the county board, either directly or through assistants.

"He determines the course of study and the textbooks to be used, subject to state regulations and the approval of the county board.

"He provides for teachers' meetings and for a system of in-service training and unifies and harmonizes through his school system the work of the schools.

"He sees that all records of educational activities are kept in proper form.

"He has charge of health education, including health inspection, in conjunction with the county medical authorities.

"He sees that the school census is taken and that the compulsory education laws are enforced."

SCHOOL ADMINISTRATION

—The Erie, Pa., school system has been aiming toward the larger school unit. Considerable additions have been made to several of the school buildings. "Just what capacity an elementary school should have," says Supt. John C. Diehl, "depends on many factors, but there are certainly advantages in a unit of at least eight hundred or a thousand capacity. The larger school organization affords better school facilities as classification of pupils for instruction may be more homogeneous and, therefore, more effective, and at the same time administration in a larger unit is more economical. In the Irving addition adequate provision will be made for our open-air classes. There will be the usual provision for academic instruction, dining room with free dinner specially prescribed to give the needed nutrition, and a restroom with cots and other necessary equipment. Irving school is located in a part of the city which is free from smoke and dust and which affords an ideal location for open-air classes."

—Upton, Wyo. A record gathering packed the school building on April 8 at the open-house program which was carried out by the school officials and pupils. A banquet was served to 500 patrons and visitors, followed by an address by State Supt. Katherine A. Morton.

—Rye, N. Y., has purchased two stereopticon lanterns and a 600-set of slides for the upper grades, and a 300-set of slides for the primary grades.

—Norwich, N. Y. The elementary schools of the city have been reorganized as neighborhood schools, with the first six grades in each building. A central junior high school has been organized. An extensive testing program has been carried out under the direction of Miss Amy J. DeMay. A summer

(Concluded on Page 110)

All finishes of LYON *Steel Lockers* must *stand* THE *hammer* test

Any enamel used on Lyon Steel Lockers must not flake under severe hammer tests—tests not duplicated in schoolhouse corridors. A finish that stands up under such tests owes its superiority to care in selecting the materials and to care in working those materials into finished lockers.

All sheet steel is annealed, cold rolled and patent levelled. The doors are of the special grade known as furniture steel. All steel is free from buckle or scale. There must be no gas pockets, to expand in the heat of enameling and blow holes through the enameled surfaces.

All parts are cleaned thoroughly before the heavy coat of enamel is applied and baked on at high temperature. The entire manufacture of Lyon Steel Lockers is in the hands and under the supervision of men who have held, for years, the leadership in the locker industry.

Consider the finish of the lockers you select for your school because lockers are permanent equipment and should be good looking as long as the building. Can we help you plan your locker installation? Lyon Engineers have had a nation-wide experience that is yours for the asking. Write us about your plans and your requirements.

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CLEVELAND	815 Superior Ave., E.	LOS ANGELES	337 S. Anderson St.	NEW YORK	342 Madison Ave.
PITTSBURGH	437 Smithfield St.	CHICAGO	230 E. Ohio St.	SAN FRANCISCO	906 Hobart Bldg.
ROCHESTER	61 South Avenue			PORTLAND, ORE.	Spalding Bldg.

(Concluded from Page 108)

school will be held in the high school during the summer.

—Miss Carrie L. Schurman, superintendent of Chouteau county, Montana, has issued instructions to school boards regarding the purchase of school supplies. Many times, she says, these agents will tell trustees and teachers that their goods are recommended by the county superintendent. Miss Schurman says: "Please pay no attention to such quotations because should I feel that you must get certain supplies, I shall send the information to you in some other way."

—Transportation companies estimate that buses carry 875,000 American children to nearly 14,000 schools every school day. About 33,000 buses are used for the purpose. During the last school year approximately $23,500,000 was spent in transporting children between home and school. In the New England states and the region north of the Ohio river and east of the Mississippi river, the ratio of such buses to inhabitants is the lowest—one bus for more than 4,000 people. The Pacific Coast states have a school bus for every 2,000 persons.

—Supt. Allen P. Keith of New Bedford, Mass., recommends that the summer-school sessions be discontinued because the results do not warrant the expense.

—When the free textbook question was presented to the voters of Columbia, Missouri, the *Herald* of that city remarked: "It is a simple, plain proposition that the books are not 'free' because someone must pay for them. The publishing houses do not and cannot afford to print books and give them away. Such philanthropy has never yet been developed. Then who does pay for the 'free' textbooks? The answer is simple. The burden falls upon the taxpayer. It will raise the taxes of every taxpayer in this city four cents on the $100 valuation, for the reason that it will take $5,000 from the city budget which must be replaced from some source, and the only source will be by raising the city tax rate to replace this deficit of $5,000 in the city budget. Another argument against the proposition is the penurious side of it. There are few parents in the Columbia school district who cannot afford to buy books for the education of their children and who want their children to become public charges in having their schoolbooks supplied."

—Mrs. Josephine Corliss Preston, state superintendent of the State of Washington, in a public address recently said that the delegates to the Inland Empire Educational Association came from a territory over twice the combined size of England, Scotland, Ireland, and Wales, exclusive of Montana with its 146,997 square miles, and stated that the eyes of the educational world are upon the northwest, as a favored section of the United States, with no colored or foreign problem.

—Governor Moody of Texas has signed two bills affecting the schools. One bill provides for a salary of $4,800 per annum for superintendents of instruction in counties having a population of 210,000 or more with office expenses of not more than $600 per year. Another bill provides for a salary of $2,800 and not more than 3,800 for the superintendent of public instruction in counties having a population of 60,000 and not more than 73,000.

—Portland, Oreg. The school board has adopted a new system of school management under which the control of the school is centralized in the superintendent, giving him greater authority and making him responsible for recommendations presented to the board.

Under the new system, the superintendent will be in charge of a managing committee, composed of executives and heads of departments in the employ of the district. All projects and subjects to be presented to the board will be studied and formulated at meetings of the managing committee. Each project will then be presented to the school board with the recommendation of the committee and the superintendent.

—The St. Louis board of education has proposed a curtailment of the summer-school program to provide that only backward pupils in the elementary and high schools shall be eligible for enrollment. The change will reduce the present cost of $300,000 by two thirds.

—The Wisconsin senate has approved a bill providing that the compulsory age limit of vocational pupils shall be 16 years in place of 18 years. The bill goes to the assembly for approval.

—Janesville, Wis. The school board has proposed the elimination of the double promotion plan because of the high cost for operation in the junior and senior high schools. Plans are being studied for a substitute to become effective with the new school year in September.

—The house judiciary committee of the Michigan legislature has approved a resolution of Senator Thomas Reed providing for the appointment of the superintendent of public instruction by the state board for a term of six years. Under the present system, the superintendent is elected biennially.

—Since the United States Supreme Court declared the child labor law unconstitutional the number of children between the ages of 10 and 16 years working for wages has increased to more than 2,500,000, according to Mr. William Green, president of the American Federation of Labor. Mr. Green holds that child labor is a national problem requiring the application of a national solution. "If the nation is to be completely saved from the degrading and destroying effect of child labor," said Mr. Green, "it must adopt the child labor amendment to the constitution. In no other way can we fully and successfully cope with this evil."

—"You can never get a boy to have his tonsils removed by telling him that it would improve his mentality," said M. C. Dietrich, superintendent of Billings, Montana, in a public address. "Just suggest he can run faster without his tonsils and he will have them out with a jump."

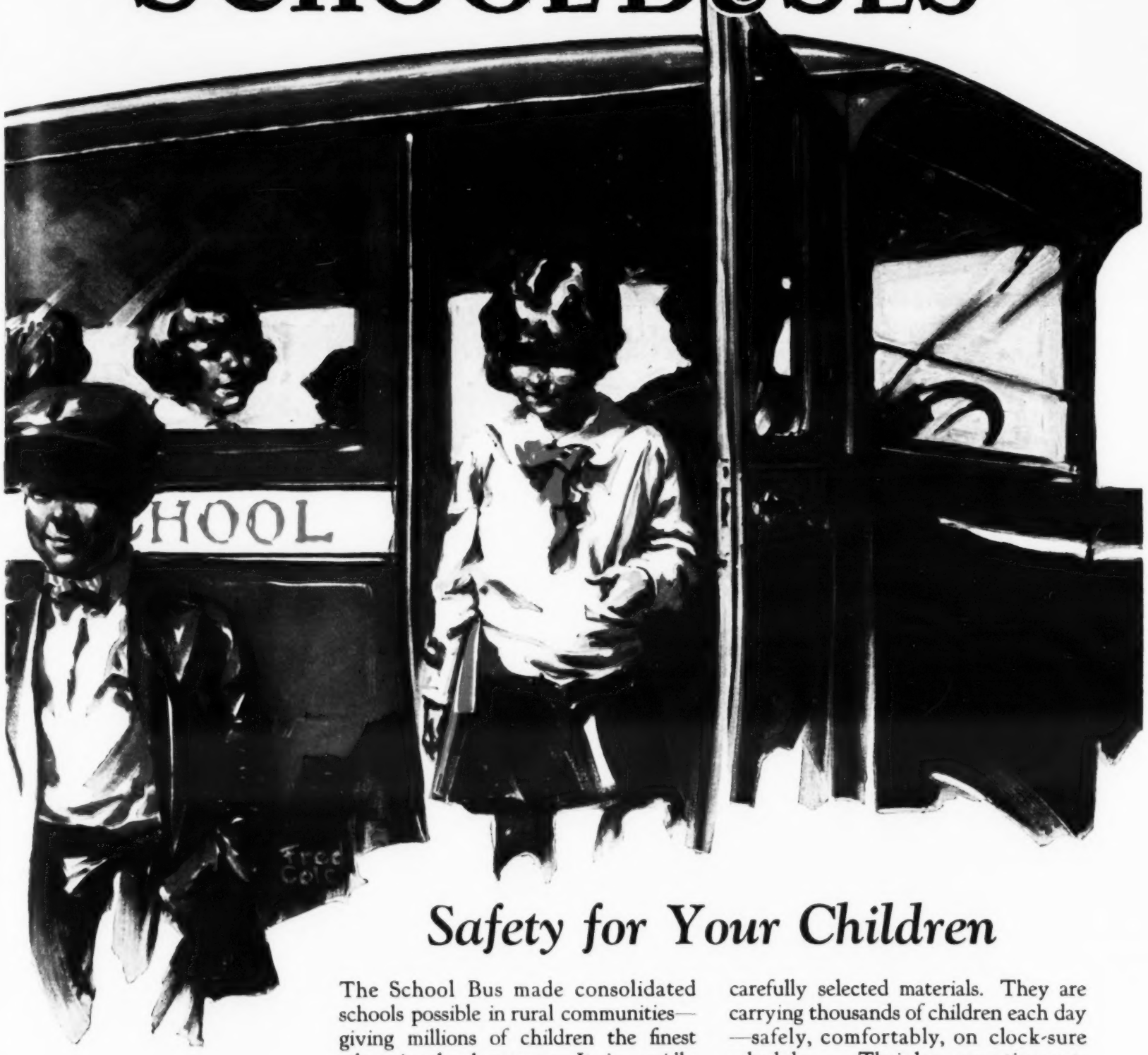
—The Chicago school system is carrying a heavy deficit. Unless the revenue is increased by July 1, 1928, it is stated, teachers' salaries will have to be reduced.

—The Terre Haute, Indiana, school system reports that over one thousand applications had been received since last December by applicants for positions to teach.

—Three teachers appointed by Superintendent Maddox of the St. Louis schools have been rejected by the committee on instruction of the board of education because they were outsiders. Asked to comment, following the meeting, Superintendent Maddox said: "Our department has devised a method of scoring applicants for teaching positions which we believe to be more exact and fair than any heretofore employed. It includes written and oral examination and a marking upon the basis of educational preparation. My policy in appointments is to recommend for any vacancy that applicant who ranks highest under the scoring. I take no cognizance of whether the teacher is resident or nonresident. The end sought is to get the best qualified teacher. All things being equal, of course, a St. Louis teacher would get preference." He noted that of 30 appointments recommended, 24 were St. Louis residents. Of the six "outsiders," three were men and three women. The committee approved the appointment of the men and rejected the women.

—The dedicatory address at the opening of the Anderson consolidated school, Caswell county, N. C., was made by Dr. M. C. S. Noble, Jr., of the state department.

GRAHAM BROTHERS SCHOOL BUSES



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The School Bus made consolidated schools possible in rural communities—giving millions of children the finest educational advantages. It is rapidly spreading the circle of its protection to school children in the cities.

Distance made motor transportation necessary in the country. Traffic dangers are making it necessary in the city. More than one-third of all the motor buses in service are carrying school children.

Graham Brothers School Buses—bodies as well as chassis—are expertly designed and ruggedly built complete in Graham Brothers own factories, using carefully selected materials. They are carrying thousands of children each day—safely, comfortably, on clock-sure schedules . . . Their low operating costs are a boon to taxpayers.

They are built by the same great organization that manufactures Graham Brothers Trucks, Commercial Cars and Motor Coaches. Initial cost is low. Service, when needed, is available from Dodge Brothers Dealers—always and everywhere.

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TEACHERS AND ADMINISTRATION

ABSENCES OF TEACHERS

—New York, N. Y. Changes in the methods of treating absence of teachers on the monthly payroll have been effected as a result of the adoption of new by-laws by the board of education. The following absences are not regarded as absence from duty, but as nonattendance, and such nonattendance must be indicated on the payroll forms opposite the name of the teacher. No deductions are made from the teacher's salary for nonattendance due to the following causes:

(a) "Absence for the purpose of visiting other schools or school activities."

An application to visit schools approved by the principal and the district superintendent, or associate superintendent or director and signed by the principal of the school visited must be submitted.

(b) "Absence caused by attendance at the funeral of an associate."

Permission signed by the district superintendent or the associate superintendent must be submitted.

(c) "Absence on account of the requirements of the board of education or of a committee thereof, of the superintendent of schools or the board of superintendents or of the board of examiners."

Certificate signed by principal and the person visited must be submitted.

(d) "Absence on account of attendance at court on business of the board of education, or under subpœna as a witness in a case in which the teacher is not interested."

Subpœna or other evidence showing the nature of the case must be submitted.

(e) "Absence with permission in accordance with subdivision 14 of section 42." (Appearance before any body for purpose of advocating or opposing legislation.)

Letter signed by the president of the board of education and the superintendent of schools or a copy of such letter must be submitted.

(f) "Absence on account of military or naval duty in accordance with the requirements of the laws of the state of New York or of the Federal Government."

Notice to report and certificate of performance of military duty, signed by the commanding officer, must be submitted.

(g) "Lateness or absence for less than one-half day on account of extraordinary delay in transportation."

Certificate signed by the district superintendent or associate superintendent indicating that the lateness or absence has been excused must be submitted.

(h) "Absence on account of compliance with quarantine regulations of a public health officer or of the department of health."

Notice from the department of health that the person's home has been quarantined must be attached to the payroll and a second notice indicating that the quarantine has been lifted must be attached to that or a subsequent payroll.

(i) "Absence of not more than three days due to death in the immediate family. In case of death on Monday or Tuesday absence on the day of death shall also be excused."

"Immediate family" shall include a parent, child, brother, sister, grandparent, grandchild, husband, wife or any relative residing in the personal household. The relationship of deceased and the date of death must be shown on the certificate submitted.

Day of Death—For absence on following school days no deduction shall be made: Sunday—Monday, Tuesday, and Wednesday. Monday—Monday, Tuesday, Wednesday, and Thursday. Tuesday—Tuesday, Wednesday, Thursday, and Friday. Thursday—Thursday and Friday. Friday—Friday and Monday. Saturday—Monday and Tuesday.

THE TEACHER SUPPLY AND DEMAND IN NORTH CAROLINA

The North Carolina Department of Public Instruction has compiled figures showing the sources of supply of teachers for the public schools of the state. The material shows the growth in number of teachers, the in-state supply, the out-of-state supply, the demand for new teachers, the improvement in training, and teacher shortage.

It is shown that during the school year 1925-26 there were 17,332 white teachers and 5,569 negro teachers. By 1950 it is estimated the state will be employing 38,000 white teachers and about 10,000 negro teachers. Indications are that there will be a decrease in the rate of increase in number of teachers employed, but that there will be a steady increase in the number of teachers employed with each succeeding year.

The study shows that there were 17,332 teaching positions for white teachers and 5,569 for negro teachers during 1926. The per cent of teachers who were beginners was .23 for white and .21 for negro teachers. The number of new teachers needed to fill positions left vacant was 3,602 white teachers and 909.49. The supply of teachers received from institutions, both in-state and out-of-state, is 1,655 white teachers and 169 negro teachers. The total number of new teachers needed is 3,986 white teachers and 1,169 negro teachers. There are 2,331 white teachers and 1,000 negro teachers, who are inadequately prepared for the work.

TEACHER-PARTICIPATIGN IN ERIE

The teacher-participation in the school system of Erie, Pennsylvania, is explained by Superintendent John C. Diehl as follows:

"For several years we have had teacher-participation in school management. Teachers of the elementary schools meet by groups four times a year. The primary grades are grouped according to grade taught and the intermediate-grade teachers according to subjects. High-school groups, including both junior- and senior-high grades, are grouped according to subjects taught. The meetings are held in part on school time and each group is organized with chairman, secretary, and the necessary committees. The lookout committee, as its name signifies, undertakes to be on the lookout for better methods, textbooks, and equipment. The executive committee arranges the programs for each meeting. Programs are designed to help teachers working in the same grades or subjects throughout the city to get better acquainted with each other, discuss common problems, standardize and improve work, and keep in line with educational progress. These meetings have proved their usefulness in many ways. Of course, there are meetings of the supervisory staff, including the principals of both high schools and elementary schools in addition to the group meetings here mentioned."

TEACHERS AND ADMINISTRATION

—St. Joseph, Mo. Mr. O. A. Zollinger, president of the school board, has received a letter from the executive committee of the Amalgamated Association of Street and Electrical Railway Employees,

in which it is pointed out that a reduction in the salaries of teachers will mean a lowering of the school standard and the destruction of an upbuilding process which has been going on for many years. The committee has approved the objection made by the newspapers of St. Joseph against the proposed salary schedule. It was pointed out that the teachers are notoriously underpaid, they should receive remuneration as nearly as possible commensurate with their services to the community.

—Mazomanie, Wis. Through action taken by the school board, married women have been barred as teachers in the school.

—Raton, Iowa. School teachers in the consolidated school are required to attend church at least once each Sunday and to remain in town on two Sundays of each month of the school year. A number of the teachers live in near-by towns and are accustomed to go home over the week-end.

—Waterloo, Iowa. The west-side school board has taken steps to discourage teachers from marrying during the school year. New contracts to be issued for the next school year contain a clause providing that if a teacher marries before or during the term designated by the contract, such act automatically terminates the contract. The rule does not apply to married women at present on the staff.

—Decatur, Ill. The school board has adopted a rule which is intended to eliminate the practice of employing married women as teachers. Under the new rule, a teacher who marries during the school year may complete the work of the year but her contract becomes void. The rule does not apply to widows with or without children, or to teachers whose husbands are incapacitated.

—Bluffton, Ind. The Wells county board of education has voted against the employment of married-women teachers.

—Minneapolis, Minn. The board of education has this year renewed its efforts to amend the rules giving preference to single teachers over married teachers. Efforts to bar married women from teaching positions last year failed, after a vigorous stand had been made before the board. A new amendment prepared by Supt. W. F. Webster provides that marriage shall not be a bar to employment of women. Where qualifications and experience are equal, preference will be given the single women.

—Senator Hegler has introduced a bill in the Kansas legislature which provides for the appointment of a special commission to study the matter of teachers' pensions.

—Wilmington, Del. The board of education has adopted an amendment of the by-laws, allowing payment of salary to teachers for all time absent from duty. The former rule permitted payment for not more than fifteen days' absence.

—Canistota, S. Dak. The town has become divided into two sections over a ruling of the school board that teachers be in their homes not later than 11 p. m. every night except Friday and Saturday.

—Morris, Ill. The board of education has adopted two new rules governing the qualifications of teachers in the schools. The first makes graduation from normal school, or its equivalent, a requirement for new teachers. The policy of the board will be to consider normal-school work as more desirable for teacher training in the elementary school than college work. A second rule adopted is to the effect that the board will give preference to single women in the employment of teachers. The rule does not apply to married women under employment.

—New York, N. Y. After nearly six years' experience, the board of superintendents has requested that a change be made in the pension credit system. It is proposed to give credit for leaves for purposes of study or for restoration of health in counting time for retirement purposes. It is the experience of the board that there are cases where the granting of credit for time spent in study may be more deserving than the granting of such credit for health leaves.

A principal or teacher who has served in Milwaukee schools for 35 years or more, upon application and cause shown to the board, will be allowed further leave of absence at half pay in the discretion of the board.

—A demand for greater safeguards of investments by the Wisconsin teachers' retirement board has been made by C. E. Broughton, of Sheboygan, a member of the retirement board. Mr. Broughton pointed out that the law requires that preference be given to small farm loans, while no definition has been given as to what constitutes a small loan. He pointed out that the commissioner of banking has supervision over loans that banks make, while the annuity board makes loans without the expert knowledge of their security.

GEORGE J. RYAN,
President Board of Education, New York City, N. Y.

MANIAC DYNAMITES SCHOOL BUILDING

Principal E. E. Huyck, Miss Hazel Weatherbee, a teacher, and 36 pupils lost their lives in an explosion which destroyed the three-story consolidated school at Bath, Michigan, on May 18. The deed was committed by Andrew Kehoe, a maniac farmer who had served as treasurer of the school district and who also lost his life in the explosion.

Kehoe had planted 500 pounds of dynamite near the school building. The horrors which followed the fiendish act cannot here be described. The bare statement of the fact must suffice. The heartfelt sympathies of an entire nation go to the good people of Bath in the hour of their sorrow and affliction.

PRESIDENT GEORGE J. RYAN REELECTED

The man who presides over the largest school system in America—namely, that of New York City—was unanimously reelected. George J. Ryan is serving his sixth term as the president of the board of education of Greater New York.

President Ryan is described by his friends as a quiet, thoughtful man who applies himself closely to the task in hand. He listens to criticisms, adverse and laudatory, and formulates his conclusions as to the immediate needs and the manner of meeting them. In pursuing his work he is tactful, circumspect, and considerate.

TEACHERS' SALARIES

NEW SCHEDULE AT HOLYOKE

—Holyoke, Mass. The principle of equal pay for equal work for men and women teachers in the high school has been adopted by the school board under a new schedule providing for increases over a period of years until the maximum is reached. The plan for operation this year means an increase of $1,147 this year, the total increase to reach $4,364 next year.

The program provides that all degrees held by teachers in order to benefit under the increased scale must be or must have been received "in course," in other words, honorary degrees given for signal service, etc., will not entitle a teacher to increased compensation, other than the ordinary scale of equal pay.

The plan in its entirety as adopted on recommendation of the finance board is as follows:

1. The same maxima shall obtain for both men and women teachers and heads of departments in the high school.

2. The maxima for teachers and heads of departments in the high school be established as follows:

Teachers

Without degree	$2,550
*With bachelor's degree	2,650
*With master's degree	2,750

Heads of Departments

Without degree	$3,100
*With bachelor's degree	3,200
*With master's degree	3,300

3. That the high-school teachers and heads of departments be advanced to the new maxima in the following manner:

A. High-school women teachers and heads of departments who have been receiving maxima salaries for five years will be given annual increments equal to one third of the difference between the old and new maxima.

B. High-school women teachers who have been receiving maxima salaries for three years will be given annual increments equal to one fourth of the difference between the old and new maxima.

C. All other high-school teachers and heads of departments, both men and women, who are receiving maxima salaries under the existing schedule will be given annual increments of $50.

D. High-school teachers who are receiving salaries below the present maxima will be advanced to these maxima in accordance with the provisions of the existing schedule and thereafter by annual increments of $50 until the new maxima are attained.

E. New teachers who begin service on salaries below the maxima will receive annual increments of $50.

4. The maxima salaries of women supervisors of special departments who teach in the high school will be increased to $2,650 without a degree, and $2,750 with a degree, attainable in the manner described above.

5. The maximum salary of the dean and librarian in the high school will be increased to $2,700 a year, payable in annual increments equal to one third of the difference between the old and new maxima.

6. The maxima salaries for girls' director of physical education in the high school and sewing teacher in the high school will be increased to $2,150 a year, attainable by annual increments of $50.

7. That, after June 30, 1927, high-school teachers, heads of departments and supervisors, on recommendation of the superintendent, be granted an additional $100 toward the maxima of their positions for each ninety hours of professional improvement work of college grade completed, but that not more than one such increment be granted in any year.

*Must be received "in course."

—Conrad, Iowa. The school board has ordered drastic salary cuts in the teaching department, every position on the faculty suffering a reduction in salary. The superintendent's salary has been reduced from $2,800 to $2,200, and the principal of the high school from $1,800 to $1,600. Two high-school teachers suffered reductions of $15 per month, while other teachers were reduced $10 per month.

—Bangor, Pa. The board of education has adopted a new salary schedule which affects the salaries of all teachers. The schedule is on a par with the schedules of second-class cities of Pennsylvania and the salaries range from $1,400 to $2,200.

MT. CLEMENS SALARY SCHEDULE

The board of education of Mt. Clemens, Michigan, on March 10 adopted a new salary schedule which is to become effective July 1, 1927. Under the plan, teachers will be rated annually by the principals and supervisors, these ratings to be reviewed by the superintendent and his staff. Such ratings, together with those of the superintendent, will form the basis for promotion which is subject to the approval of the teachers' committee and the board of education.

The symbols used in rating teachers will be: E, poor; D, below average; C, average; B, very good—above average; A, very superior. Teachers rated D may be retained another year but a teacher rated thus a second time will not be reemployed.

Teachers entering the school system for the first time will be placed in the schedule at such point as their preparation and experience seem to warrant. Eight years is the maximum credit for outside experience.

A leave of absence for purposes of study, up to and including one year, without pay, may be granted. Teachers will be allowed an aggregate of absence not to exceed ten days in any school year for illness or other reason satisfactory to the superintendent, during which time they will be entitled to one half of their contract salary for the period of absence. In cases of death in the immediate family, teachers will receive full pay for a reasonable length of time. The schedule is as follows:

SCHEDULE FOR "C" TEACHERS

Years in Service	2 years training	3 years training	4 years training
0	$1,200	$1,400	$1,600
1	1,250	1,450	1,650
2	1,300	1,500	1,700
3	1,350	1,550	1,750
4	1,400	1,600	1,800
5	1,450	1,650	1,850
6	1,500	1,700	1,900
7	1,550	1,750	1,950
8	1,600	1,800	2,000
Salary Limits for "B" Teachers:			
	1,800	2,000	2,400

Salary limits for "A" teachers will be subject to special action by the board of education.

Promotions:
"B" Teachers $100 per annum.
"A" Teachers $150 per annum.

MICHIGAN CITY SALARY SCHEDULE

—The board of education of Michigan City, Indiana, has adopted a salary schedule providing salaries for teachers and principals in the grades, junior and senior high schools.

(Concluded on Page 118)

(Concluded from Page 116)

Under the schedule, teachers in the grades possessing 72 weeks of training but no degrees, will be given a minimum of $1,235, with ten increases of $47.50 up to a maximum of $1,710; teachers with degrees (four years) from standard training schools, will be given a minimum of $1,425, with ten increases of $47.50 up to a maximum of $1,900.

Junior high-school teachers (except manual-training and household-arts) without degrees, will be given a minimum of $1,235, with ten increases of $47.50 up to a maximum of $1,710; teachers who hold degrees will be given a minimum of $1,558, with ten increases of $57 up to a maximum of $2,128.

Junior and senior high-school teachers of manual training, without degrees, will be given a minimum of $1,795, with five increases of $47.50 up to a maximum of $2,033; teachers with degrees will be given a minimum of $1,795, with five increases of $57 up to a maximum of $2,128.

Junior and senior high-school teachers of household arts, music, art, writing, and prevocational teachers, without degrees, will be given a minimum of $1,558, with ten increases of $47.50 up to a maximum of $2,033; teachers with degrees will be given a minimum of $1,558, with ten increases of $57 up to a maximum of $2,128.

Senior high-school teachers (except manual-training and household-arts), with degrees, will be given a minimum of $1,558, with ten increases of $57 up to a maximum of $2,128; teachers without degrees, will be given a minimum of $1,558, with ten increases of $47.50 up to a maximum of $2,033.

Grade-school principals, without degrees, will be given a minimum of $1,805, with ten increases of $47.50 up to a maximum of $2,280; principals, with degrees, will be given a minimum of $1,805, with ten increases of $57 up to a maximum of $2,375.

Junior and senior high-school principals will be given a maximum salary of $3,600 per year.

TEACHERS' SALARIES

—Houston, Tex. The school board has voted to adopt the "four-year plan," giving teachers increases in salary on condition that there is money in the treasury to pay the increase. The increases in salary are not expected to exceed $30,000 more than the natural increases under the old schedule.

Under the four-year plan, teachers may go to school one summer, teach in the summer school another summer, travel the third, and rest the fourth summer. Each year an increase of $50 will be given.

—Flemington, N. J. Salary increases of $100 each have been given to high-school teachers, and increases of $50 to $100 to elementary teachers. The school board has authorized the teachers' committee to offer a minimum of $1,300 in place of $1,200 to new elementary teachers.

—St. Louis, Mo. The school board has adopted a new salary schedule for principals and teachers in summer schools. The schedule provides for the following salaries:

Principal of high school, $10 per diem salary; principal of elementary school, $8; teacher in teachers' college, $8; teacher in high school, $6; teacher in elementary school, $5.

—Hammonton, N. J. The school board has adopted a new schedule, which provides for minimum and maximum salaries and annual increments of salaries. Under the schedule, teachers with two years' normal or college training will be given a minimum of $1,200, and six annual increments of $75, up to a maximum of $1,650; teachers with three years' normal or college training will be given a minimum of $1,330, and seven increments of $85, up to a maximum of $1925; teachers with four years' normal or college training will be given a minimum of $1,500, with eight increments of $100, up to a maximum of $2,300; teachers with five years' of professional training, including one year of graduate work, will be given a minimum of $1,700, and nine increments of $125, up to a maximum of $2,825.

The schedule provides that the minimum qualifications for elementary teachers shall be two years of normal training above the high school. For high-school teachers, the minimum is a four-year normal or college training above the high school. The schedule is a single-salary schedule, which pays the same salary to teachers with equal training and experience regardless of the branch of the work in which they are employed. New teachers coming into the schools from another city will be credited with fifty per cent of the amount provided the size of the school system and the amount of training are up to the standard.

—Portland, Oreg. The advisory committee of the teachers' retirement fund association has presented recommendations calling for a revision of the rules governing the teachers' retirement fund. The recommendations are as follows:

"The annuity to be paid should be $75 per month for 12 months in the year.

"Teachers under 45 years of age should contribute to the association a sum sufficient to purchase an annuity of $37.50 a month.

"Teachers 45 years of age and under 55 should contribute a sum sufficient to purchase an annuity of $25 a month.

"Teachers 55 years of age and over should contribute a sum sufficient to purchase an annuity of $17.50 per month.

"Provision should be made by legislative enactment that the district be empowered to levy a tax each year which will enable it to pay annuities equal to the difference between what the teachers' contributions will purchase and $75 per month.

"Retirement shall be optional at or after 60 years of age insofar as the teachers are concerned.

"In the event of physical disability resulting either from accident or disease, the district will pay an annuity equal in amount to what the member's contributions will purchase at the date the disability occurs and $75 per month.

"The by-laws of the association should provide that in the event a member's contract with the district terminates for any reason there shall be refunded the total amount paid in with interest.

"Teachers who were members of the corps prior to 1912 but who did not join the association when it was organized should be permitted to join without penalty. Those who have since become members should be given credit for payments made in the form of penalties."

—Supt. Wm. J. O'Shea, of New York City, has approved religious instruction for children outside of school hours, as advocated recently by Cardinal Hayes and other speakers, at a meeting of Catholic school teachers in the public schools. At present the schools are cooperating with parents who wish their children to have religious instruction outside of school hours, according to a plan worked out several years ago by Dr. O'Shea and representatives of the Catholics, Jews, and Protestants. Supt. O'Shea believes the schools should not refuse the help that the churches of the various faiths give outside of school hours in their endeavors to build up the character of the children. There is no doubt in his mind, he says, about the effectiveness of the churches in reducing crime.

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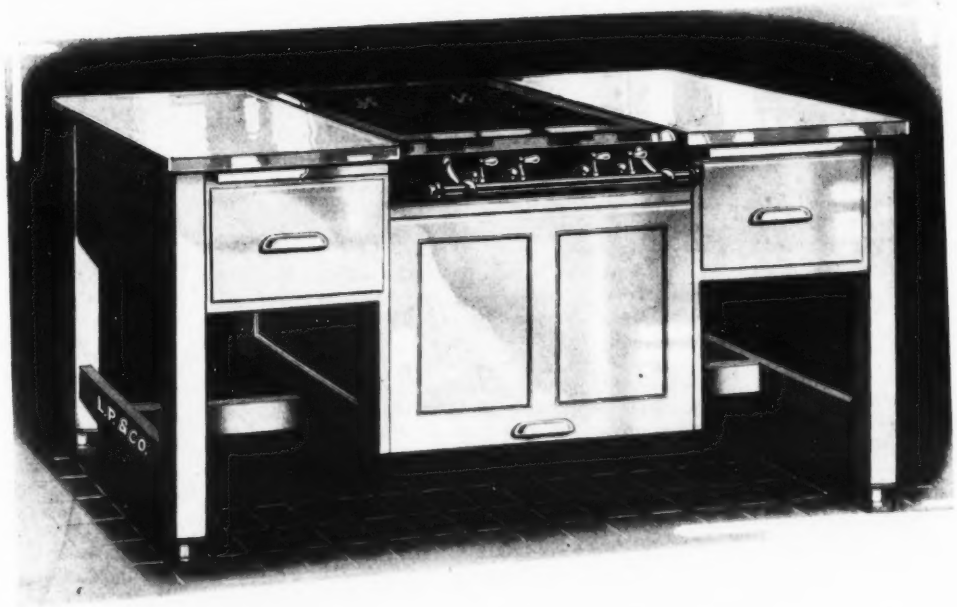

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THE LUNCHROOM PROBLEM IN NEW YORK CITY

The board of superintendents of New York City has recommended to the board of education the adoption of a new plan which is to determine the future action in the developing and improving of school lunches. Under the new plan, the administration and operation of school lunches in the elementary and junior high schools will become a part of the homemaking department. The director of this department will be assigned as director of school lunches.

An assistant director of homemaking will be employed to act as operating manager of school lunches. The assistant director must be a qualified dietitian, and her duties will include the planning, preparation, and service of all food, the training and directing of employees in elementary and junior-high-school lunchrooms, and the opening of new lunchrooms, and other duties as prescribed by the homemaking director. All supervisory assistants in the operating department must be trained dietitians.

The former position of manager of school lunches, under the new plan, will be changed to business manager of school lunches. The duties of this official will be the hiring of help in the various lunchrooms and kitchens, and the discharging of such employees as are inefficient in their work, as reported by the operating manager, provided each dismissal is approved by the associate superintendent attached to the homemaking department. The business manager will have charge of the purchase of supplies and equipment and will work in cooperation with the superintendent of supplies. All requisitions for supplies and equipment must be signed by the director of homemaking. The business manager will also have charge of the transportation of food and will perform such other duties as may be prescribed by the homemaking director.

In the operation of the new plan, concessionary service in elementary and junior high schools will be eliminated. The price of food in the lunchrooms will be determined by the board of superintendents after consideration and recommendation of the director of homemaking, the operating manager, and the business manager of school lunches.

In order to effect a practical plan for financing the establishment of lunches in schools in which they are not now maintained, or to conduct lunches in schools in which concessionaries are now in charge, it is provided that a sum of $10,000 shall be allotted to the department of homemaking as a turnover or revolving fund, for the purchase of equipment and such other expenses as may be necessary to organize and enlarge the school lunch work.

The changes which are to be made are in the direction of a reduction of the annual cost of operating school lunchrooms. The recommendations of the board of superintendents are the result of conferences held with the chairman of the school lunch committee and the director of the homemaking department in which reports were submitted as to the practice in use in Rochester, Buffalo, and Cleveland.

SCHOOL STRIKES

—At New Albany, Ind., 700 high-school students went on a strike because the school board failed to reappoint Principal Charles B. McLinn and Miss Alice Funk. They staged a parade about town and refused to return to school until the board had rescinded its action. The board is in a deadlock over the matter.

—Two hundred students of the Jasonville High School, Terre Haute, Indiana, went on a strike because the school board refused to retain Jerry Naugle, a coach of athletics, and two teachers.

—Twelve hundred pupils went on a strike at Superior, Wis., because the school board dismissed Miss Dickinson, a high-school teacher. They paraded about the streets and remained away from school for several weeks.

—The pupils of the Almont, Michigan, high school went on a strike over the dismissal of the superintendent. After the strike the schoolhouse, valued at $100,000, was burned. Incendiarism is charged.

DR. BURRIS DIES SUDDENLY

Dr. Benjamin J. Burris, formerly state superintendent of public instruction for Indiana, died suddenly on April 27, while giving an address at Hope. Dr. Burris was 45 years old.

Dr. Burris was a graduate of the Central Normal College of Danville, Ind., and attended the law schools at Danville, Indianapolis, and Bloomington. He had a varied teaching career, having served as teacher, principal and county superintendent in the Indiana schools, and later practiced law at Washington, Ind.

Dr. Burris was appointed assistant superintendent of public instruction under Dr. Horace Ellis in 1917, and was retained in office when Dr. Hines assumed the office of superintendent in 1919. In August, 1921, Dr. Burris became state superintendent, succeeding Dr. Hines, who had resigned.

NEWS OF SCHOOL OFFICIALS

—Miss Virginia Watson, secretary and chief clerk of the school board of East Aurora, Ill., has been reelected at a salary of $1,800.

—The school-board election at Madison showed that Mrs. E. V. O'Shea, a candidate, received five more votes than did Mrs. J. W. Madden. The latter demanded a recount and won out by 103 votes.

—The city council of Durham, N. Car., has voted to retain Mrs. Walker and Mrs. Brogden as members of the school board.

—The new members of the St. Louis, Mo., board of education are Arthur S. Wernemeyer, Dr. David C. Todd, and Henry P. Schroeder.

—Mr. F. A. McCornack has retired as president of the school board of Sioux City, Iowa, after a service of fifteen years. Mr. McCornack was honored with a special dinner and program, attended by the members of the school board and representatives of every department of the school system. A large basket of flowers was presented to Mr. McCornack at the conclusion of the program, and he responded with a brief talk.

The new president of the school board is Mr. R. N. Van Horne.

"AMERICAN" INVITES EDUCATORS

—The American Seating Company has issued a general invitation to school executives, superintendents, principals, and teachers to visit its Grand Rapids plant during the coming summer. The invitation has been given with the idea of giving school officials an opportunity to see the product which aids teaching so vitally in course of construction.

The industrial campus covers sixteen and one-half acres of ground, with buildings which are perhaps the finest and most modern structures ever built for housing the manufacturing processes of a seating industry. The factory employs several thousand men and women and 85 skilled inspectors, and the school desk division alone has a daily production throughout the year of 2,500 school desks in a variety of models.

The close relation of the school-seating problem with teaching methods should cause the invitation to be met with an enthusiastic reception by a large number of teachers and school officials.

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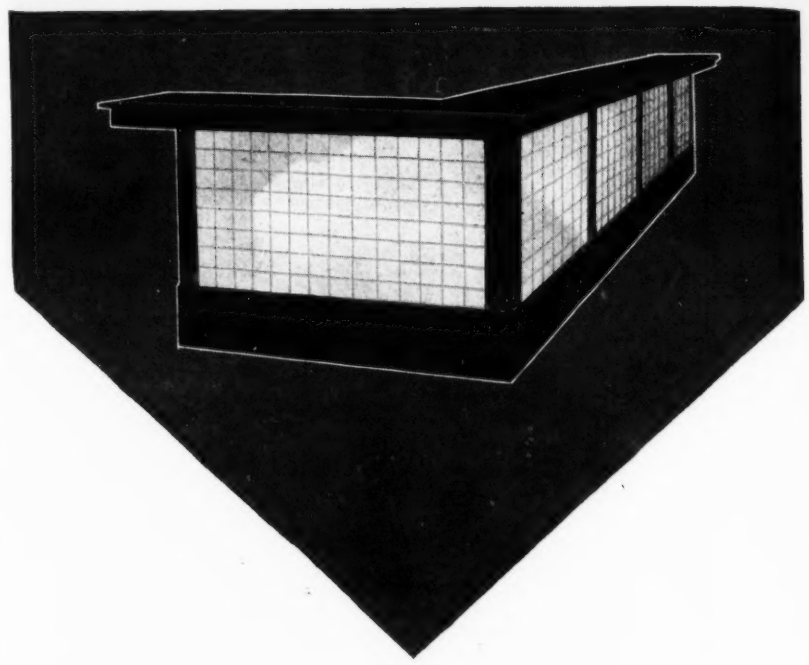

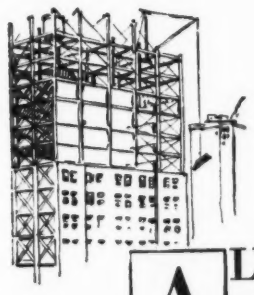

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WASHINGTON CORRESPONDENCE

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Mental Measurements in the Washington Schools

The Division of Tests and Measurements of the Superintendent's Office, District of Columbia Public Schools, has completed its work of giving standardized mental tests to every child in the school system. A reorganization based on the results of these tests is well under way. Children are being put in classes according to their mental capacities. Teaching methods have been changed to meet the mentalities in the new grouping. More rapid progress for those of mentalities above the average is possible. More individual instruction for those below the average is already provided. The whole intention of the measurement work is to assist and develop the individual child and avoid the past levelling process of the ordinary promotion system.

It is now four years since the work started. Its success is shown by the progress of children grouped as a result of the tests in 1923-24. In that year 495 pupils were given an extra promotion because they showed by the tests special mentality. Of these to date only nineteen have failed.

When first applied more or less opposition arose from parents. This has largely disappeared. Miss Jessie LaSalle, in charge of the testing, states:

"There have been innumerable instances of parents who began as bitter opponents of the tests only to become staunch supporters of the work when they saw the results achieved with their children. The effect upon the pupils has been exactly contrary to the predictions of the antagonists. Instead of feeling humiliated they become happier and more interested when they discover themselves surrounded by pupils their own mental and physical size. Formerly the laggards had come to expect that they would not be promoted and had given up trying. Their repeated failures eventually brought them into association with children much younger and smaller, which had a bad psychological effect all around.

"Bright children often became frustrated and broken with the constant drag of the duller children on their intellectual progress. This now is remedied.

"Seldom does a child realize he has been segregated, especially if he has been put with a slower group where there might be some humiliation in the realization. The very fact that he was of the type of mentality to be so classified speaks for his lack of sensitiveness and alertness which would make him conscious of the shift."

Fire Resistance of Hollow Tile

Fire tests of hollow load-bearing wall tile have recently been completed at the U. S. Bureau of Standards.

The safe and economical use of hollow tile, as of other masonry materials, for load-bearing, party, and fire walls requires knowledge not only of the strength of walls under conditions of everyday use but also of the strength and fire resistance under conditions imposed by severe fires. Prior to the initiation of the work herein reported, only a few tests have been made. The Hollow Building Tile Association, recognizing the limitations that were being imposed on the use of the products of their members because of the lack of information on behavior under conditions of use, established in 1920 a research fellowship which has been continuous since that time. Several series of fire tests with compression and other auxiliary tests of individual tile have been completed.

The initial part of the fire-resistance work consisted of tests of tile from nineteen different plants, the tests being made by fire application on one side of piers 1 ft. wide and 6 ft. high. The main object was to determine the fire effects on the individual units. The results of this series of tests gave information which made possible the selection of a minimum number of plants for supplying tile, of the various types and common designs, for tests of large walls (11 by 16 feet) such that the full range in fire resistance of the product as manufactured would be developed. The latter series consisted of fire-endurance tests (and a few fire and water tests) of plastered and unplastered walls, tested unrestrained, restrained and loaded, the range in thickness being from 8 to 16 inches. Additional tests of smaller walls (4 by 4 feet) were added in order to include more types of tile and to bring out the maximum resistance period developed by the heavier walls. This series of tests was further augmented by tests of small walls built of tile embodying certain features promising increased fire resistance.

The second series of fire tests was made to determine the influence of certain factors, such as size of unit and effectiveness of plaster, and of certain changes which can be made in the manufacturing process.

Ground burnt-clay additions to three different kinds of clay of 0, 2½, 5, or 10 per cent by volume of grog content were used. The walls of tile with no grog or only small amounts withstood longer fire exposures than those built of tile having 5 or 10 per cent grog. A microscopic examination of fractures of tile containing grog showed minute cracks, probably from drying or burning shrinkage, radiating from the grog particles into the clay matrix. These fine cracks were apparently responsible for the difference in fire effects noted.

Tile with combustible filler (sawdust) to the amount of 0, 5, 10, and 15 per cent were tested. It was found that additions of combustible filler up to 15 per cent to clays, more especially to the dense burning clays, will increase fire resistance. Large amounts added to clays that normally give tile of low strength may decrease the strength to such an extent as to make the tile unsuitable for load-bearing walls.

It was found that moderate fillets of up to ¼- or ⅜-inch radius are desirable, but that larger fillets are not beneficial.

The tests showed that tile should be burned to a normal degree of maturity, but that hard-burned tile are more susceptible to fire damage. These, as well as other tests, particularly those in the first series, indicate that there is no advantage from the fire-resistance standpoint in underburning.

Numerous tests with fire exposures of one and one half hours or longer duration show that, properly applied, gypsum plaster of acceptable grade, and also cement plaster with lime substitutions of 50 per cent or less by volume, will stay in place throughout fire exposures up to the fusion point of the plaster. These tests also show that many unplastered walls which would be damaged by short fire exposures would suffer only minor damage if plastered. Later tests of furred walls show that the use of furring and plaster will further decrease the susceptibility to damage of the structural part of the wall.

The third series of fire tests consist of fire-endurance tests and fire-and-water tests of large walls,

supplemented with a number of tests of walls 4 ft. high in the small furnace.

Forty-six full walls of this series were subjected to tests in the large furnace. A number of these walls were divided into two sections, each 8 ft. long and embodying variation, such as change of plaster or mortar in one section, so that in effect two tests were made simultaneously. On this basis 73 tests of large walls were made. Of these, four were subjected to fire and water tests. In addition, approximately the same number of small walls, 4 ft. square, were subjected to fire tests.

As indicated by the tests the ability of tile walls to carry load under fire exposure is governed by the kind of clay used for the tile and the design of the units. A few 8-inch unplastered walls, which were built of light-weight tile, of very dense tile, or of heavier tile of comparatively low-unit strength, failed under the applied working load or were damaged to such extent as to make them unsafe after fire exposures of 25 minutes to two hours. All other walls carried the working load up to or beyond the useful limit, as determined by temperature transmission, for all periods up to eight hours.

The fire damage varied greatly in amount, depending mainly upon the kind of clay used and upon the design of the units. Tile from some sources showed little effects after the fire exposure and units from others suffered material damage after relatively short fires. The fire damage to the individual units consisted mainly in the fracture of the webs holding the exposed shells. The damage rarely extended beyond the first longitudinal web except after long exposures.

The deflection of walls unrestrained at the top or vertical edges was away from the fire, being about 5 inches maximum at the top of 8-in. walls and 3 inches at the top of 12-in. walls. In cooling, all of the test walls returned to within 2 inches of their original positions. The deflection of restrained or loaded walls was toward the fire, being a maximum at the center of the wall. For 8-in. walls the movement at this point during the fire varied from ½ to 2 inches and in cooling they returned to within less than ½ inch from the original undeflected position. The amount of deflection decreased with increased wall thickness, being for 12-in. walls from ½ to 1 inch, with recovery to within ½ inch from the original position.

According to present specifications, an average temperature rise of not more than 139 degrees C. (250 degrees F.) is permitted under asbestos pads placed on the unexposed side of the wall when subjected to the standard fire exposure for durations equal to the fire-resistance period required. The average periods developed in the tests for given wall thicknesses are from one half to one hour longer than these values.

Dependent and Delinquent Children

A report of interest to school authorities has just been issued by the U. S. Bureau of the Census, giving statistical and other information on children under institutional care. It includes data relative to dependent, neglected, and delinquent children in institutions, and under the supervision of other agencies for the care of children.

The first section of the report relates mainly to dependent and neglected children and gives statistics for the following classes of organizations: Institutions for dependent children or for adults and children; child-placing societies; humane and protective societies; and day nurseries.

The second section of the report includes statistics for dependent adults; that is, inmates of homes for the aged, infirm, or destitute, temporary shelters for the homeless and unemployed, and homes for convalescents or incurables. The statistics show approximately 80,000 persons in such homes in 1923.

The third section deals primarily with inmates of institutions for juvenile delinquents. Detailed information for this class was obtained from 145 institutions receiving children on court commitment. In combination with the above, similar data are presented for prisoners under 18 years of age in prisons and reformatories, and somewhat less comprehensive data for those in jails and workhouses.

Institutions for dependent children are conducted largely under private auspices. Institutions for delinquents are nearly all public (i.e., state, county, or city) institutions. For all classes of organizations combined, the number of children in institutions or under supervision in 1923 was 404,678. This total was made up as follows:

In institutions primarily for dependent children	141,083
In institutions for adults and children	10,272
Under care of child-placing societies	67,168
Day nurseries	22,822
Own homes, with aid of mothers	121,412
In institutions primarily for juvenile delinquents	30,115
Other institutions or agencies	11,806
Total	404,678

District of Columbia Schools and the Acceptance of Gifts

At a recent meeting of the board of education the following recommendation of its committee on rules was adopted:

"Gifts of permanent equipment or material should not be received by any school official unless formally offered to and accepted by the board of education, and all offers of gifts of permanent equipment or material should be referred to the committee on building, grounds, and equipment for consideration and recommendation before final action is taken by the board of education."

Considerable discussion has arisen, particularly in parent-teacher associations, over this ruling. Some of them seem to feel that it is an attempt on the part of the school board to control the finances of these associations. The board, on the other hand, states that no such purpose is in mind. It desires, however, to guard against the receipt of gifts on the part of any of the school officials or employes which would be unsuitable for school purposes under accepted policies of the school system, or which would entail money for installation or upkeep when no funds might be available for the purpose.

Death of School Supervisor, Washington, D. C.

Benjamin W. Murch, 69, for the past eleven years superintendent of schools of the first division of the District of Columbia, has died after 40 years of continuous service in the public schools of Washington. Mr. Murch came to Washington from Maine in 1887, and held various positions until made a supervisor nineteen years ago.

Retirement of Principal of the City Normal School, Washington, D. C.

Miss Anne M. Goding, principal of the City Normal School for white teachers of the District of Columbia, has resigned, the resignation to take effect at the close of the present year. At that time she will have completed 26 years' service as principal of this school. She has been, for 34 years, a member of the faculty of the school, and for 44 years connected with the Washington public-school system.

Miss Goding has been an active advocate of plans recently adopted by the board of education to increase the course of instruction in this school from two to three years. With the coming school year

(Concluded on Page 126)

The "United-American" Hotels are rapidly changing to VULCAN

Vulcan-equipped kitchen in the King Edward Hotel

UNTIL a few years ago, the fifty-four hotels that compose the United-American System, were equipped with coal-burning ranges. Today, many of these kitchens are Vulcan-equipped. The others are rapidly changing to the Vulcan Hot-top gas range. This is more than a tribute — it is a trend!

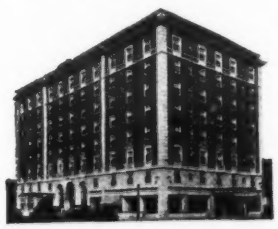
Why this change? The inadequacy of the old-time coal range is the answer. Coal means storage costs, extra-labor costs, hot uncomfortable kitchens, no heat control. Vulcan stands for perfect control based on a red hot spot and graduated heat zones. Cooler kitchens! Better cooking results! *Lower fuel costs!*

Most gas ranges are an advance over the coal range. But the Vulcan, with its patented aeration plate, 4 ring-control, strong direct flame—the Vulcan leads the gas range field.

If you are re-equipping an old kitchen, or planning a new one, you should have all the facts before you. Just send for your free copy of the Vulcan book. Hotel Department, Standard Gas Equipment Corporation, 18 East 41st Street, New York.

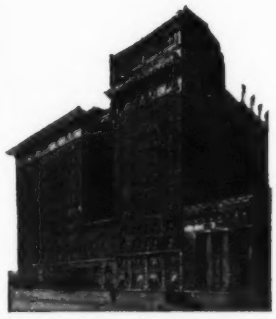
VULCAN GAS HOT TOP RANGES

King Edward Hotel, Toronto, Canada. The menus have helped to bring fame to this Canadian Hotel. Equipped with Vulcans by the Consumers Gas Company, Toronto.



The Walt Whitman Hotel, Camden, N. J. A home-like atmosphere and good food draw friends to this hotel. Kitchen is Vulcan-equipped.

Mount Royal Hotel, Montreal. One of Canada's foremost! Changed from coal to Vulcan. Installation by Montreal Light, Heat & Power Co.



The Onondaga Hotel, Syracuse, N. Y. Vulcan installation by L. Barth & Company.

The Hawthorne Hotel, Salem, Mass. This new hotel in the New England group favors the Vulcan. Installation by Salem Gas and Light Company.

The Utica Hotel, Utica, N. Y. One of the early installations in a "United-American" hotel. Its Vulcans have stood the test of years!

STANDARD GAS EQUIPMENT CORPORATION

(Concluded from Page 124)

the new plan will go into operation and many changes in the details of the school's operation will become effective. Miss Goding states in her resignation that she feels that as she would reach the retirement age very soon, her successor should be selected and these changes should be put into operation by the successor and not by herself.

American Council on Education

The annual meeting of the American Council on Education was held during the past month in Washington, D. C. Representatives from various educational organizations and institutions from all parts of the United States attended. The program was largely to do with cooperation between the industries and educational institutions. Dr. Charles H. Judd, head of the Department of Education of the University of Chicago, urged upon the council a special study of education in all of its branches throughout the United States by a committee composed of educators, and men and women from various professions and occupations, to develop a program which might serve as a guide to development in the future. Dr. Judd feels that education, at present, is cut up into too many badly articulated divisions. He believes the entire field should be reviewed by a competent committee interested in the final productions of all educational endeavors and not in any particular stages in the educational program.

The executive secretary of the council reports total expenditures for all branches of its work during the past year of $109,184.60. A budget for the present year of approximately $176,000 was approved.

Economy in Use of Lumber in Manual-Training Work

The Forest Service of the United States Department of Agriculture has issued a circular addressed to school officials and manual-training teachers in public and private schools of the country, urging a more economical use of lumber in manual-training work. Attention is called to the fact that cheaper grades of lumber can often be used to just as good purposes as absolutely clear stock. Short lengths can often be used as advantageously as 16-foot clear boards, which investigation shows is so often purchased for manual-training purposes. The small pieces called for by most of the manual-training work can be cut from low-grade lumber containing knots and other defects. To do so would be to help the movement for better utilization of low grades in lumber. Most of the greatest wastes of timber, according to the Forest Service, comes from our failure to find and devise uses for the lower grade materials. The entire cost of lumber can be lowered somewhat by developing a market for this low-grade lumber. Manual-training departments, by using it, can do much to encourage its use in those industries which use small pieces of standard sizes.

U. S. Bureau of Standards. Brick-Wall Investigations

A helpful report on the strength of brick masonry will be available soon to school authorities, and others interested in buildings. During the year 1926 the U. S. Bureau of Standards, in cooperation with the Common Brick Manufacturers' Association of America, conducted a series of tests on brick masonry which, from the size and number of test specimens and control, and measurement of variables, is noteworthy and unique.

While brick masonry is one of the oldest recorded types of construction, there has been practically no data upon which to erect standards. This lack of fundamental information is probably largely responsible for the present unsatisfactory state of specification writing as applied to brick, and the wide variation in building-code requirements concerning brick masonry.

The investigation may be considered as divided into two sections. The first section consists of an investigation of the properties of individual bricks. These bricks are representative of four types of commercial production and are believed to be typical. Information gained from the results of this work has been made use of already by one of our national societies devoted to standardization. The second section consists in the construction and test of walls as hereinafter described. The results obtained from the individual tests, correlated with the results obtained from the masonry tests, give information directly applicable to the formulation of standards and specifications for brick.

The program consists of tests on 153 walls, divided into four series. The variables consist of 2 types of workmanship, 4 kinds of clay brick, 3 kinds of mortar, and different types of construction covering 8- and 12-in. solid walls and the various 8- and 12-in. hollow walls used by the Common Brick Manufacturers' Association. Tests on the association's 4-in. economy wall are also included.

The results secured from the tests on hollow walls of brick will be of interest because they will help to answer the question as to whether the traditional solid masonry may not be in part replaced by a wall which permits a more economical utilization of the material.

The two types of workmanship have several distinctive features, the chief one being the practical absence of vertical-joint filling for the walls in series 1, as against complete filling of joints in series 2, 3, and 4. Series 1 was constructed by contract, to secure a grade of workmanship comparable to uninspected commercial work. Series 2, 3, and 4 are constructed by day labor with rather careful supervision. However, no laboratory refinements are introduced for the walls.

The mortars are a 1:3 lime-sand, a 1:1:6 lime-cement-sand, and a 1:3 cement-sand, all by volume, though the actual mixing is by weight, correction being made for the moisture content of the sand. In series 2, 3, and 4 an amount of hydrated lime equal to 10 per cent by volume of the cement is added to the 1:3 cement-sand mortar. It was originally intended to have the four grades of brick (one for each series) correspond to the four grades specified by the American Society for Testing Materials, viz., soft, medium, hard, and vitrified. On testing the brick it was found that they graded as follows:

	A. S. T. M. Grades in—		
Brick for—	Compression	Modulus of Rupture	Absorption
Series 1.....	Medium	Vitrified	Medium
Series 2.....	Medium	Hard	Soft
Series 3.....	Hard	Hard	Soft
Series 4.....	Vitrified	Vitrified	Hard

In addition to the tests made to determine the A. S. T. M. grade, additional tests were made for tensile strength and strength in shear, for absorption without boiling, and for rate of absorption.

The walls are 6 ft. long by approximately 9 ft. high and of nominal thickness of 4, 8, and 12 in., depending upon the type of construction. For each wall a corresponding small wall or wallette, 18 in. long by 34 in. high, is built. The walls are tested by loading concentrically to the maximum in the 10,000,000-pound compression machine. Strain measurements are taken both horizontally and vertically. On some walls readings are taken for repeated application of load.

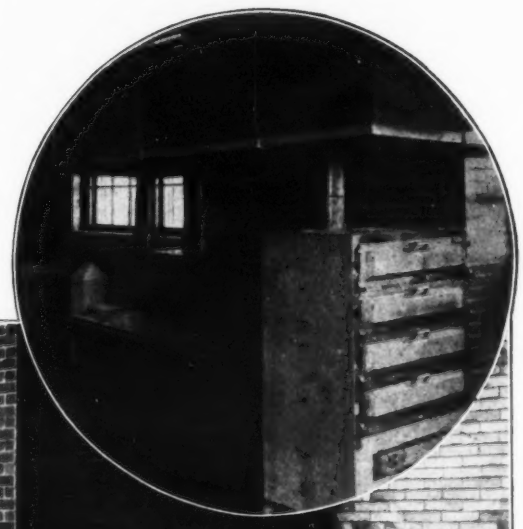
Every School Needs a "Van" Cafeteria

EVERY school needs a cafeteria. Ergo, every school needs a "Van" Cafeteria—because economy, dependability and lasting endurance are fundamental qualities of "Van" Equipment. Any "Van" user (there are thousands) will tell you why!

Our Engineers will gladly show you how a "Van" Cafeteria will meet your needs. Or, if you require replacements, how to fill these most advantageously. There is no difference in cost. You can judge for yourself the difference in calibre between "Van" Equipment and any other.

ABOVE, a "Van" Cafeteria in the Bolton High School, Alexandria, La. In circle below, kitchen of the Bolton High School.

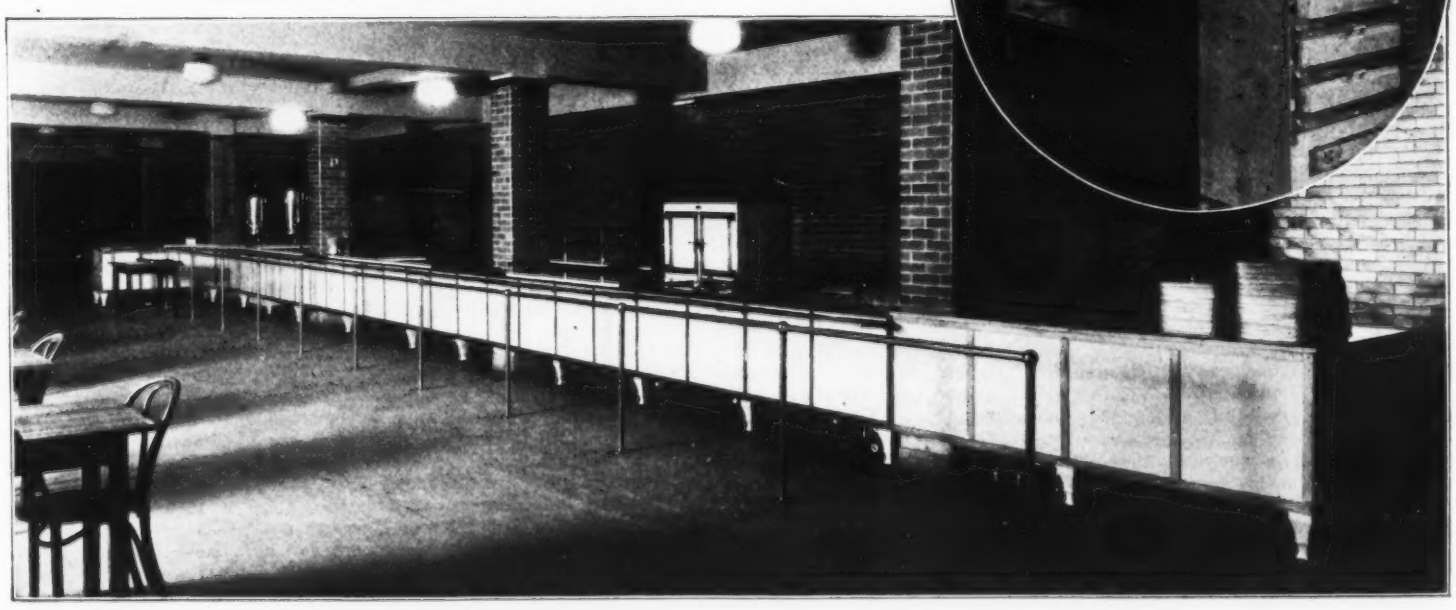
Lower view, an unusually large cafeteria counter in Charleston High School, Charleston, W. Va.



NEW ORLEANS
CLEVELAND
ATLANTA

The John Van Range Co.
EQUIPMENT FOR THE PREPARATION AND SERVING OF FOOD
Cincinnati

CHICAGO
LOUISVILLE
DETROIT



THE STATE PRINTING OF TEXTBOOKS

Periodically a bill pops up in some one of the legislatures of the Western states providing for the state printing of textbooks. Such a bill has made its appearance biennially for several years in the State of Oregon and again made its appearance during the past winter.

The State of California has for years operated a state textbook printing plant, and is frequently asked as to its operation. The public officials identified with the scheme defend it, while the educators of the state have never favored it. C. C. Chapman of Portland, Oregon, desirous of getting at the truth regarding the state textbook printing scheme directed a series of questions to Dr. Elwood P. Cubberly, the distinguished California educator. The first of these was: "Is state printing a success?" to which Dr. Cubberly made the following reply:

"It is not a success, though it can hardly be said to be a complete failure. The quality of many of the state-printed textbooks has in the past been so poor that they have been in part laid aside by the schools, and other textbooks bought from textbook publishers from local funds of the districts. You see, the districts are permitted to buy 'supplemental textbooks,' and under that authority they purchase textbooks that are better and more satisfactory from an educational standpoint, as well as being more durable in use. The state-printed textbooks have been inferior in printing, paper and binding to those which can be purchased from textbook publishers, so they wear out more quickly. Also, their contents, the text itself, often is not so satisfactory from an educational standpoint as that of books which could be obtained in the open market. The texts, too, are adopted for a long period of years, and when a new and better textbook appears we are not only not free to use it but, when a change is made, the cost for new plates is an additional burden the taxpayers must carry."

"Do you meant that the texts are not up to date?"

"Some of them are not exactly up-to-date in material, but that is not so important as the fact that they at times do not represent the best in educational method. There is a constant improvement going on in educational method and in textbooks. As better methods are developed it is important to have textbooks which make possible the use of better methods. The textbook publishers are right on their toes to supply this demand, but a state cannot adapt itself quickly, and continues to put out textbooks which are not so serviceable educationally. By purchasing direct from publishers, our schools would be enabled to supply textbooks which are adapted to the best instructional methods, with the result that the pupils would be benefited educationally far more than is possible where teaching method is restricted within the limitations of one textbook uniform for the whole state. State printing of necessity means uniformity in textbooks for the whole state, whereas every educator knows that our schools and children vary widely in needs."

The Question of Cost

Mr. Chapman then discussed the question of cost, and the following discussion ensued:

Chapman: "Undoubtedly you have seen the cost report to which I have referred; is it accurate otherwise?"

Cubberly: "It does not include a number of overhead charges such as interest, depreciation, and replacements on the machinery and equipment required. These would be a material item if computed, and undoubtedly would show the real cost per pupil per year to be materially in excess of that reported."

Chapman: "Who pays this excess cost, the overhead cost?"

Cubberly: "The state, of course."

Chapman: "That means, it comes out of whoever pays the taxes, the same as do the costs that are reported?"

Cubberly: "Oh, yes, it is just as real a cost to the taxpayer; it cannot be escaped. To this must be added the nominal cost for the textbooks supplied, and the cost of supplying the so-called supplementary textbooks and so-called reference books, which the schools purchase for use to supplement the textbooks which the state supplies. The school districts will always manage to buy the books they feel are needed to give the children the best instruction. If the more intelligent districts cannot buy the preferred textbooks by charging the cost to one account, they will charge it to another, but will get good textbooks. Most California school districts are progressive, and they are determined to have the best for their children. The taxpayers not only have to pay for the textbooks selected for use by the district, but also for the textbooks furnished by the state."

Chapman: "To recapitulate, the net result of state printing, so far as the taxpayer is concerned, is an increased cost while so far as the schools are concerned, it is an educational disadvantage to use the uniform state-printed textbooks, insofar as they are used, rather than to use textbooks such as may be purchased from textbook publishers and have liberty as to choice. You would strongly advise then against any state embarking in state printing of textbooks?"

Cubberly: "Yes, though primarily on educational grounds, because of uniformity imposed and the impossibility of procuring the best texts as they appear; incidentally on economic grounds, because it results in such waste that the final cost to the taxpayer is greater with state printing than it is by purchasing textbooks from publishers."

APPRECIATION IN SCHOOLWORK

The efficiency of a school system depends in large measure on the confidence of teachers and principals in the leadership of the superintendent. The superintendent must be fair and generous in his relations with teachers. Work that is conspicuously good should receive cordial acknowledgment. Work that is not satisfactory should be the subject of frank and just criticism and should be accompanied by definite constructive suggestions for correcting deficiencies. The teacher should be made to feel that the attitude of the superintendent is entirely friendly; that teacher and superintendent are sharing in a common problem, finding a way to overcome the difficulties which caused the unsatisfactory results. Many times teachers have been known to say, when presented with unfavorable reports: "But nobody ever told me that my work was not satisfactory." This is unfair to the teacher, unfair to the pupils, unfair to the school system, and in the end means failure for the supervisory official who does not do his duty. Teachers usually respect the supervisor who is fair and just in his dealings with them.

—R. W. WILSON, Paterson, N. J.

—Waukesha, Wis. Under the new time schedule adopted for the junior and senior high schools, school sessions begin at 8 o'clock in the morning and close at 3:30 in the afternoon. The regular lunch period of an hour and fifteen minutes will be continued as at present.

A Superintendent's Letter to His Principals

To the Principals and Heads of Departments:

Standard tests of classroom achievement are of great value in administration and supervision when properly used. They show the supervisor where there is wrong emphasis in teaching if it exists, and every good teacher knows that it does exist. The results of standard tests furnish the basis of comparison with the standard achievements of good school systems, grade by grade and subject by subject. The tests show where drill and practice are needed and also where further drill and practice are not necessary.

By no means the least beneficial result from standard tests is the fact that through the use of these tests the class itself knows how it stands in comparison with a standard achievement, and the individual pupils knows how he stands in this respect.

Tests of classroom achievement, however, like most good things, may be used in such a way that the good effects are offset to a considerable extent by the bad effects. The bad results from testing are likely to exist to a greater degree if the purpose of using standard tests are not kept constantly in the forefront of the supervisor's planning.

The main purpose or aim in using standard tests should always be the improvement of educational achievement by teachers and pupils. All other aims and purposes must be kept subordinate to these. They should not be used for comparisons among schools in the same school system. The achievement of one school, or of one grade in the same school, is conditioned by too many things over which the principal and the teacher have no control to make this comparison a profitable part of supervision or administration.

It sometimes happens that even when the main purpose as stated above is kept clearly in mind the bad effects overbalance the good. A supervising principal may aim to improve the work of a particular class or teacher in some particular subject such as arithmetic by posting the results of testing two or more fifth grades in her buildings. By means of the tests and comparisons the achievement of the poorer grades (and possibly of all of them) may be bettered in arithmetic, and still the total result may be bad.

That the first requisite for a good school is a good teacher is accepted by everyone. But we do not always remember an equally important truism, viz: that a teacher who is not happy in her schoolwork is never a good teacher. If a teacher gets the impression that her class is being tested for the sake of records and comparisons she becomes worried and nervous. She drives her pupils because she thinks she is being driven. She loses her efficiency through attempting to be efficient.

In like manner the supervising principal may easily lose her efficiency by attempting to be efficient, because the larger purpose of the campaign of supervision is lost sight of in the dust of the little skirmish over some minor objective.

Records and scores should always be considered only as some of the means by which we attain our objectives. They must not be allowed to become the objectives themselves.

Standard tests cannot be justified unless they improve instruction and the results of instruction. That they can be made to do just this when properly used is a well-established principle in the methodology of supervision. On the other hand, it is certain that in some cities the use of standard tests has resulted in a lessening of the efficiency of instruction and the results of instruction. This is almost sure to be the result if the tests are used for the purpose of making good record scores for the sake of publicity or "for the purpose of arousing a friendly rivalry among teachers and classes." Such "friendly rivalry" is too liable to spoil the peace of mind and good will of teachers.

The only record or class score that a supervisor should encourage a teacher or class to excel is the previous score of that class never the score of some other teacher's class.

Let not the servant become the master.

—*Superintendent of Schools.*

A COST DISTRIBUTION CHART FOR SCHOOL USE

Mr. H. H. Davis, of the Division of Tests and Measurements, St. Louis, Mo., has devised a cost distribution chart in order to present a large number of vital cost figures in handy reference form. The chart will be particularly useful to the school executive in comparing present cost statistics of the school system with similar figures for other years, or with figures from other cities for the same year.

It is also useful in answering the ever present questions on costs.

The chart should be used in three ways:

1. By leaving blank items three and nine, the *current* costs for the year are displayed.

2. By using "Imputed Interest" and "Depreciation" in items three and nine respectively, the *true* cost of education for the year is shown.

3. By using "Debt Service" and "Capital Outlay" in items three and nine, the distribution of *expenditures* is set forth.

A set of three charts filled out in the above ways and placed in the hands of the superintendent at the close of each fiscal year enables him to answer at once most of the cost questions raised.

In filling out the items of General Control, Auxiliary Activities, Instruction, Co-ordinate Activities, Operation of Plant, Fixed Charges, and Maintenance, the rules of the Bureau of Education for reporting school costs are used. Where Debt Service and Capital Outlay are computed the rules of the department for reporting those items may be followed.

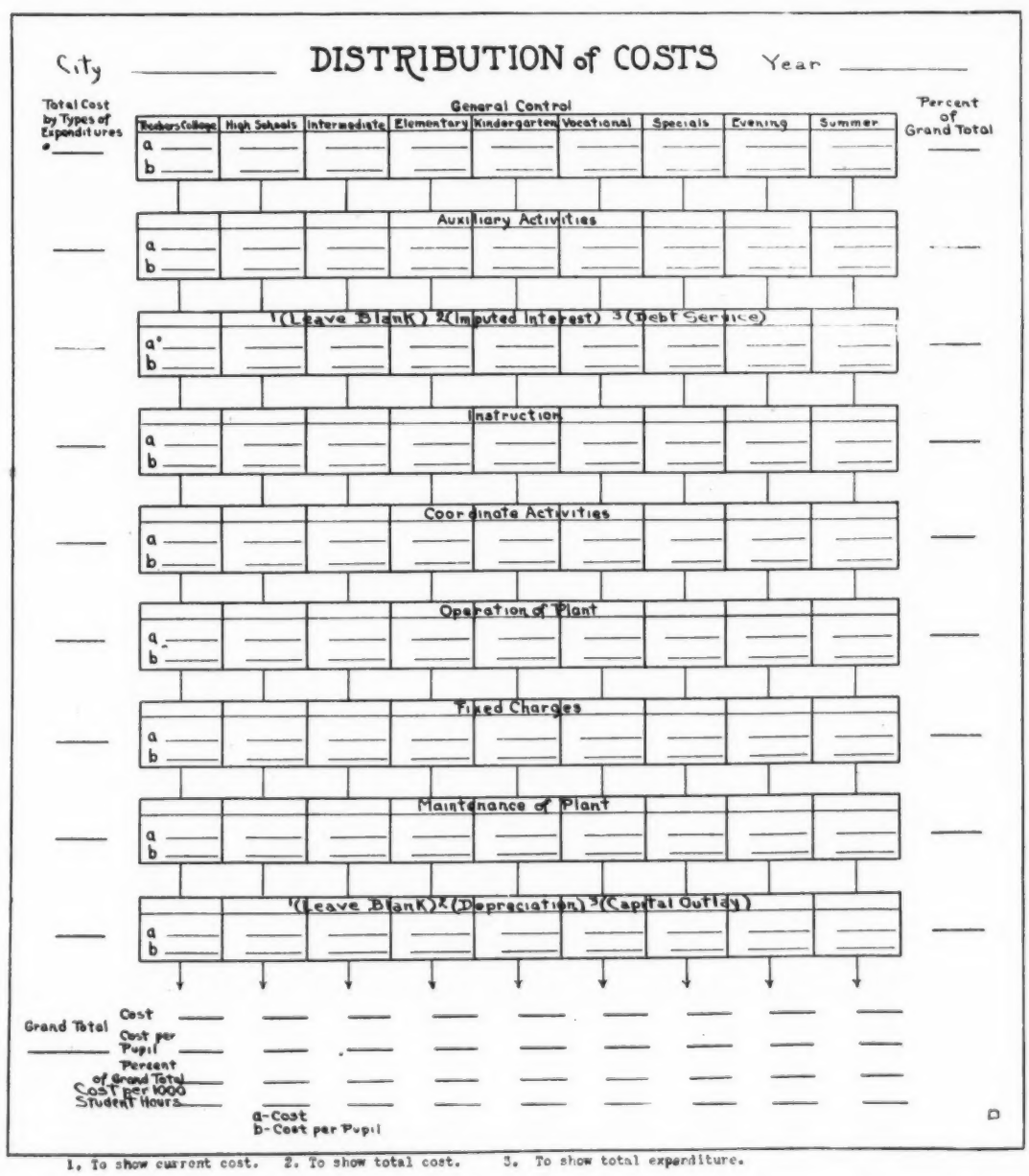
Depreciation is figured on the cost value of the plant and equipment at a rate determined for the city using the blank. There should probably be neither depreciation nor appreciation computed on the value of the land.

Imputed Interest is the interest, at current rate for municipal long time loans, on the present value of the school plant. Since the annual depreciation represents wealth consumed in education, the value of the plant after depreciation represents the amount of wealth tied up in educational projects.

The column at the left, headed "Total Cost by Types of Expenditures," shows the total cost of General Control, Auxiliary Activities, etc. The column at the right, headed "Per Cent of Grand Total," shows what part of the total cost of education goes to General Control, Auxiliary Activities, etc. The columns in the body of the chart, headed "Teachers' College and High School," show the cost of General Control, Auxiliary Activities, etc., distributed to kinds of schools, and also the annual cost per pupil for each.

At the bottom of the chart are shown the Grand Total Cost (which, of course, must be the sum

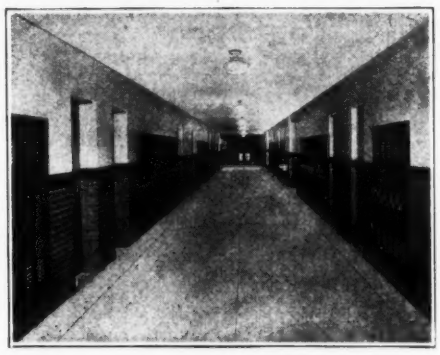
(Continued on Page 133)



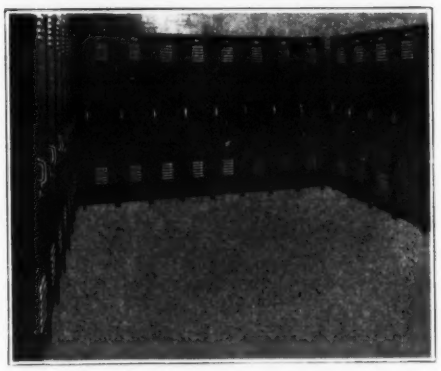
1. To show current cost. 2. To show total cost. 3. To show total expenditure.

A USEFUL FORM FOR DISTRIBUTING SCHOOL COSTS.

"No better built than Durabilt!"



Third Floor Corridor.



Team Room Lockers.

Girls' Gym Lockers.

REPEATED tests have proven that the best does not always cost the most. Superintendents of Schools, Business Managers, Purchasing Agents, Architects and authorities on school construction recognize Durabilt Steel Lockers as a superior product and in the light of these facts it was inevitable that they should award to Durabilt a volume of orders which has made it necessary to operate our modern factory continuously day and night in the producing of this quality product.

As a result of our large production we have effected numerous economies which have been passed to the ultimate user in the form of exceptionally attractive prices, making Durabilt the greatest locker value on the market today.

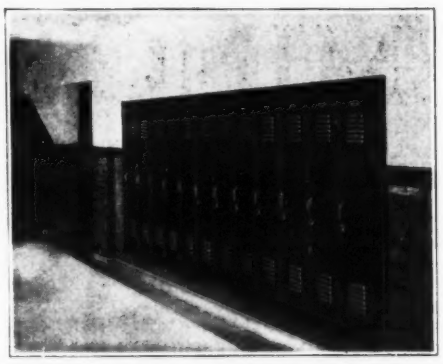
It is evident to anyone who makes a comparison of the points of superiority of Durabilt Steel Lockers that they back up the slogan

"No better built than Durabilt!"

Because of these reasons Durabilt Steel Lockers are used in the best schools of Chicago, Detroit, Philadelphia, Houston, Denver, Portland, San Francisco, Trenton and hundreds of other important cities where quality in equipment is just as paramount as quality in personnel of staff.

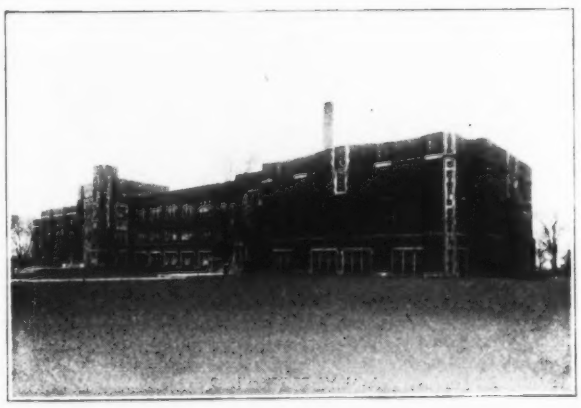
While you will find a few of the many applications of Durabilt Steel Lockers in the attractive illustrations of the Princeton High School, we are sure it would prove very profitable for you to call on our local Sales Representative, who will gladly show samples, quote prices, or assist in any way possible in solving your locker problems.

Main Floor Corridor.



Second Floor Corridor.

Gym Box Lockers.



Princeton High School, Princeton, Ill.

Two Sections of Durabilt Lockers.

"No better built than Durabilt!"

DURABILT STEEL LOCKER CO.

400 ARNOLD AVE., Sales Offices in all Principal Cities AURORA, ILL.

(Concluded from Page 130)

of the totals by kinds of schools, as well as by types of expenditures, hence must total the same both ways); the total cost and the cost per pupil per year in each kind of school; the per cent of the total cost going to each kind of school; and finally, the cost per 1,000 student hours of each kind. The 1,000 hour figure is valuable in showing comparisons for summer and evening schools whose hours are so short as to make the annual cost look very low.

The figures in the body of the chart for all except items three and nine will be the same in each of the three ways of filling the chart. The total cost by kinds of schools and the per cent figures will be different with each way and the grand total varies with the addition of items. In the first method, it represents the current cost of education to the community, in the second, it represents the actual total cost, and in the third, the total expenditure (part of which is *investment* rather than expense).

REDUCING RURAL-TEACHER TURNOVER

"The turnover in one-teacher and two-teacher schools is much greater than in schools of three or more teachers. This is due to several reasons: (1) salary; (2) meagerness of teaching equipment; (3) living conditions; (4) lack of proper supervision; (5) youth and inexperience of the teacher; (6) inability of one individual to become adjusted to the social life of the community."

This statement was recently made in a public address by S. M. N. Marrs, state superintendent of Texas. He continued: "Consolidated rural schools, village, town, and city schools that offer better salaries are continually depriving the group of one and two-teacher schools of their best teachers. A schedule of salaries increasing for reemployment in successive years in the same school would inspire the teacher to endeavor to please, and, in a measure, would counteract the temptation to change for more adequate compensation. This schedule also should recognize superiority in real teaching and educational leadership. To make this plan effective, however, larger units than local districts must set up the standards.

"The enterprising, well-trained, professional teacher will be dissatisfied with lack of proper equipment. She will feel that she cannot render her best service and she will need special help to cope with this handicap. She will be inclined to cast her lot with a school system financially able and professionally inclined to furnish the necessary tools with which she may render the best service.

"The living conditions in districts having one-teacher schools are frequently such that little enjoyment can be experienced by the teachers. Dissatisfaction and discontent urges change which results in the teacher's seeking more desirable environment. School officials should realize that it is a part of their duty to aid teachers in securing good homes. Consolidation of one-teacher schools assembles those having a common interest and frequent changes of position may be avoided by furnishing the teachers comfortable homes at the expense of the district.

"Summing up, then, what should be the program to prevent teacher turnover in rural districts: 1. Larger units of control. 2. Overlapping terms of school-board members. 3. Provision for tenure of service. 4. Adequate salary schedule. 5. Adequate teaching equipment. 6. Comfortable living conditions. 7. Better supervision affecting both social and professional life. 8. More consolidation to bring about social intercourse with other members of the profession. 9. Suitable courses offered by teachers' colleges differentiating with reference to rural and urban schools. 10. The encouragement of the use of the school buildings as community centers; the organization of parent-teacher associations resulting in broadening the vision of the school officials as well as the citizens of the entire community."

THE MODERN SCHOOLROOM

"Classrooms in a modern school building, whether elementary or high school, or for whatever purpose they are used, are more economical of floor space and ceiling heights than those in buildings erected fifteen or twenty years ago," said Homer W. Anderson, assistant superintendent of the Denver schools, before an N. E. A. audience at Dallas, Texas. "It is estimated that the saving in cubical contents varies from twenty-five to forty per cent.

"Modern classrooms are better lighted. Classrooms are narrower from window to inside wall; thus adequate light is provided in all parts of the room. They are lighted from one side rather than from two or more sides; thus injurious cross lights are eliminated.

"In recently erected school buildings progress has been made in interior arrangements so that they meet the needs of pupils and teachers more effectively. Scientific studies are being made today of school furnishings and equipment and their arrangements in relation to an educational program which fits the activities carried on in the classroom, laboratory, or shop.

"The up-to-date laboratory or shop is equipped so that it can be used for more than one type of classwork. In other words, an English class can work effectively in the modern science laboratory. There need, therefore, be little or no waste in the use of perfectly good space because the equipment is not adapted to more than one activity. School interiors are more beautiful than in the past. Many cities are making beauty spots of kindergartens, auditoriums, and libraries.

CASH DISCOUNTS ON SCHOOL BILLS

The routine and red tape which attends public business does not always permit the business advantages which accrue from the expedition practiced by private enterprises such as cash discounts, etc., etc. The board of education at Rochester, N. Y., proposes to secure discounts on the prompt payment of bills where such discounts are granted.

Secretary J. S. Mullan of the school board has sent the following communication to all firms from which purchases are made:

"Inasmuch as it requires considerable time in our office to check bills and approve them for payment, it must be thoroughly understood that in all cases where cash discounts are requested that the ten days or whatever time you allow must begin from the time the goods are received and the bill checked O. K. For example, quite often a bill is presented in advance of the delivery of the goods and so dated. The good may arrive two or three days after the receipt of the bill and then require some time to check and approve for payment. It will, therefore, be necessary for us to have sufficient time to do our work properly and take advantage of the discounts. The date, therefore, on a two per cent or whatever basis you designate should date from the time that the bill has been properly sworn to, checked and O. K.'d in this office. We assure you that on all cash discounts preference will be given, and as little time as possible will be taken in securing the necessary data to approve the bill. On all bills in the future which do not state the net or discount we will deduct two per cent at ten days. Kindly advise if this arrangement is agreeable and understood so that we can handle your bills accordingly."

PERCENTAGE OF MEN TEACHERS DECLINING

The Ohio Schoolmasters' Club has set for itself the task of ascertaining the reasons for a decline in the percentage of men teachers as against women teachers. It has been learned that the percentage of men teachers in the United States has decreased from 43 per cent in 1880 to 11 per cent in 1921.

George E. Davis, principal of the Walnut Hills high school, Cincinnati, took the initiative in securing the cooperation of the United States Bureau of Education in a nation-wide survey of the status of men in education. As a result a committee consisting of Dr. E. J. Ashbaugh, Ohio State University; Dr. C. A. Gregor, University of Cincinnati; Dr. William L. O'Connor, research department, Cleveland; Dr. W. S. Guiler, Miami University; and F. W. Witmer, of Toledo, was created.

This committee is at present actively engaged in securing data on the following:

1. The schoolmaster in literature.
2. Trend as to relative members with respect to the whole teaching body.
3. Experience and attitude of men who have left the profession.
4. Same for men who have remained in the profession.
5. Attitude of men and women not connected with teaching.
6. Attitude of high-school students.

From this material the committee hopes to ascertain definitely the reasons for the decline in percentage of men teachers. Once the causes are known, means for correcting the situation can be developed.

BREAK GROUND FOR BIGGEST SCHOOL

The proposed De Witt Clinton high school to be erected at Jerome Park Reservoir tract by the New York City board of education, is under way. It will be the largest high school (student capacity, 5,124) in the United States. The above picture shows Joseph V. McKee, president of the board of aldermen, breaking ground. Behind him to the left are President George J. Ryan of the Board of Education, Chairman John A. Ferguson of the building committee, and William J. Weber, member of the board from the Bronx, and to the immediate right Joseph V. Miller, Jr., secretary of the board of education.

State School Board a Legislative Body

The acts of a state board of education should be legislative only, the execution being the function of the state's chief school officer, who may be a superintendent or commissioner. This is the conclusion reached by the United States bureau of education after making a study of the subject. The bureau discusses the same in the following manner:

The state's program of education must have first a legal basis resting upon its constitution and the duly approved acts of its legislature. In certain instances this legislation charges the performance of certain educational duties directly to local civil governments, or to special school units; usually however, it is carried out through certain state officers. In most states there is a state board of education, in all a state department of education.

The board usually has general supervision of the State's educational program as determined in its constitution and laws. It acts only as a body. Its acts are legislative, the execution being the function of the state chief school officer and the state department of education over which this officer presides. In other words, the state department of education is the functioning body for the state board.

The new and enlarged conception of education is adding new importance to the chief educational officer in the several states—i. e., the state superintendent of public instruction or commissioner of education, and the state department of education of which he is a part and the head.

The office, as originally created in the older states, was chiefly clerical and statistical, much like the old county superintendency. Almost any person chosen from the general electorate could then fill the position to the satisfaction of the public. But the demands of today require a new type of educational leadership, able to administer the manifold problems of modern school organization and administration, general education, school sanitation, industrial and vocational education, interrelation of the elementary and higher schools and educational legislation.

Forty-two Boards in Existence

Modern educational development is toward provision for a state board of education as the administrative head of the state's educational system. Forty-two states have such boards with functions relating to the common schools. Two states have no such boards. In several states boards have been organized since the passage of the Smith-Hughes Vocational Education Act to administer the funds provided under this act. Their duties, like those of many ex officio boards, are nominal. In others the state boards of education administer only the higher educational institutions, such as the university, agricultural college, and normal schools.

State boards of education are made up in the following ways: Ex officio membership, composed of state officials, usually including the Governor and chief state school officer, and of other members selected from among other state officials, as the attorney general, secretary of state, state treasurer; ex officio education officers, as presidents of higher institutions, including universities, colleges and normal schools (in some cases the law provides that these boards include one representative who is a city superintendent, one who is a county superintendent, or similar regulation); membership confined to persons not engaged in educational work; members may or may not be engaged in educational work; and various combinations of the above.

Methods of appointment.—In 33 states some or all of the members of state boards are appointed or elected. In 28 of these the power of appointment is vested in the governor, subject in some cases to approval by the state senate. In three the state legislature makes the selection, in one state the board is elected by popular vote, and in one appointment is left to the state chief school officer. In the other states appointment is made in part by the governor, in part by certain educational boards, and in one state in part by the senate.

Appointment System Growing

The tendency in the selection of members of state boards of education seems to be toward appointment by the governor. Two methods of selection; (1) appointment by the governor and (2) administration. The first method, appointment by the governor, has these merits: (1) It centralizes full responsibility for all the departments of public service, including the management of schools, in the executive head of the state. This tends to unity and economy in administration. (2) It is believed that this method protects the board from undue political influence. Selection is often restricted to an eligible list or limited in some other manner. The advisability of the governor being a member of the board he appoints is doubtful.

Election by the people is favored by many authorities on school administration because: (1) It centers responsibility definitely on a group of persons elected specifically for one purpose, namely; that of having general charge of schools. (2) It represents more nearly a direct expression by the people of their wishes in the management of school affairs than does appointment. (3) It follows our custom of making those intrusted with legislative functions directly responsible to the people. (Administrative authorities are generally agreed that the chief functions of a state board of education are legislative rather than executive.)

Size of board, term of office, mode of retiring members.—The present tendency is toward a state board of education composed of from five to nine members, each of whom holds office for a term of from five to seven years. The time of retirement is so arranged that a majority of the board remains constant; that is, one member retires each year, or two or three each alternate year. The smallest boards, as now constituted, are those which are composed of ex officio members.

The term of office of members of ex officio boards is fixed by law and ranges from two to four years. The members usually retire simultaneously. This may be regarded as representing a passing type. In 25 of the 42 states having state boards of education the number constituting a board ranges from seven to thirteen members. Boards of this size, with continuity of service provided, are generally considered as satisfactory in size for working efficiency. Neither too large nor too small a board is desirable.

According to authorities on school administration, the state board of education, like the city board, should be a lay board representing the larger educational policies of the public, delegating the professional side of education and the administration of its general policies to its appointed executive officials, the state superintendent of public instruction or commissioner of education, and to the heads of the several higher educational institutions, if any, under its supervision.

The board should be composed of from five to nine members appointed by the governor by and with the consent of the senate, the term of office

(Concluded on Page 138)

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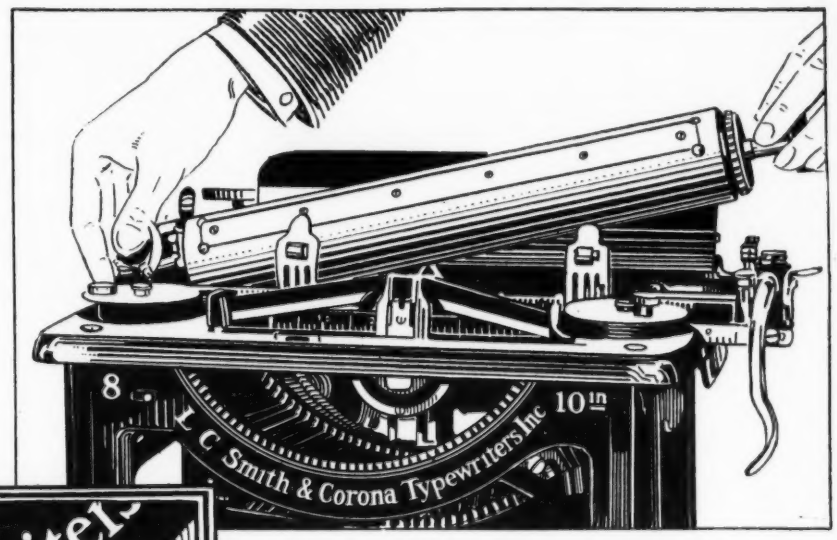

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(Concluded from page 136)

to be five to seven years, one member to retire each year, or two in each biennial period, thus perpetuating the board's policies and giving it stability and a degree of permanency. Vacancies should be filled by the governor. The appointment should be for absolute worth and without regard to residence, occupation, party affiliation, or similar considerations. The members should serve without remuneration, except for a reasonable per diem and actual traveling and other necessary expenses. The maximum number of days for which such per diem may be paid should be fixed by law.

The general powers of the state board should include the following, keeping in mind that the state board is a legislative body, the state superintendent of public instruction or the commissioner of education acting as its executive officer:

1. To know the educational needs of the state and to determine its educational policies so far as authority is conferred upon it to do so by the constitution or by acts of the legislature.

2. To have general oversight and control of the public-school system of the state as may be determined by law, and of other schools insofar as charged by specific legislation.

3. To select the chief state school officer, who becomes its executive head; to determine his powers and duties; and the function of the state department of education under his direction.

4. To adopt the necessary regulations and set up standards for education in the state relative to compulsory education, school buildings, school equipment, courses of study, qualifications of teachers, physical education, medical inspection of children, school records and reports, etc.

5. To have general control over such educational institutions as the state schools for the deaf and blind, industrial reform schools for boys and girls, and educational work in state reformatories and penitentiaries, and state hospitals.

6. To have general regulatory control of or to establish cooperative relations with all teacher-training institutions conducted by the state.

7. To act as a board of control for the state library and historical collections.

THE VALUE OF SCHOOL PROPERTY IN NORTH CAROLINA

The state department of public instruction of North Carolina has compiled information showing the growth in the value of school property for white and colored schools over a five-year period. The material shows the increase in the number of schoolhouses, the value per schoolhouse, the relation between rural- and city-school systems, the per-pupil value of school property, and the present situation in school property valuations.

The report shows that the total appraised value of all public-school property used for elementary and secondary educational purposes was $84,541,828 in June, 1926. This was an increase of $13,835,993 over the preceding year and nearly three times the value of property used for these purposes during 1920-1921, five years previous, or more than twenty times the value of that used in 1905-1906. The total value of school property in 1905 was $3,182,918, which in ten years had grown to $10,434,117, and in another ten years had grown to $70,705,835.

The change in the number of schoolhouses from year to year is interesting. At the close of 1925-1926, there were 6,795 schoolhouses in which elementary and high-school instruction was given to both white and colored children of the state. Two years previous, 1923-1924, there were 7,360 schoolhouses used for this purpose; and in 1904-1905 there were 7,376, approximately the same number. It appears that the peak was reached in 1914-1915 in the matter of the number of schoolhouses. Such was not the case as the total number of schools increased gradually from 1904-1905 until 1918-1919. Since that year the number of schoolhouses at the end of each successive year has been less than each preceding one.

With an annual increase in the value of school property, and an annual decrease in the number of schoolhouses, the value per schoolhouse from year to year has increased at a greater rate of speed. In 1925-1926 the average value of school property per schoolhouse for the state was $12,306; in 1918-1919 it was $1,978; and in 1904-1905 it was only $432. From 1904 to 1914 the average value did not double, but from 1914-1915 to 1919-1920 it more than doubled, and from 1919-1920 to 1924-1925 it more than trebled. At this rate the average value of a schoolhouse at the end of the school year 1929-1930 will be approximately thirty or thirty-five thousand dollars.

A significant phase of the situation is the relation between rural and city-school systems. Approximately 54 per cent of the white-school property was in rural schools at the close of the school year 1925-1926.

The average value of the rural schoolhouses for white children is $9,727, whereas for city children the average is $102,550. The average value of the rural schoolhouse in 1925-1926 was not as great as the average value of the city schoolhouse in 1904-1905. The average value of the schoolhouse used by rural colored children was $124 in 1904-1905, and $1,668 in 1925-1926, whereas the average schoolhouse used by city colored children was valued at $3,134 in 1904-1905, and $31,069 in 1925-1926. In other words, the average value of the rural schoolhouse in 1925-1926 was about one half of the value of the average city school in 1909-1910.

In 1904-1905 the value of rural-school property per white child enrolled was $4.70; whereas in the same year the average value of city property per child enrolled was $37.61. During this year the average value of colored-school property was $2.07 and $12 for each respective division.

In 1925-1926 school property for white children averaged $92.53 per rural child and $250.41 per city child, a difference of $157.88, or over twice as much. In this year, 1925-1926, the average value of colored-school property per child enrolled was $18.90 in the rural schools, and $86.94 in the city schools.

The 4,404 schoolhouses used for white children were appraised at $73,729,278, and the 2,393 schoolhouses used for colored children were valued at $8,812,550—an average value of $16,749 and $3,683 for each schoolhouse of each respective race. The white pupil has an average of $130.70 worth of school property invested, and the colored pupil $34.61.

The city schools are much better equipped with property than the rural schools, and the larger the cities, the more property there is available for each child. In the eight largest city systems, the average value of school property per child enrolled is $291.92 for the white race, and $107.42 for the colored race. The rural schools have less property per child than any other group—$92.53 per white pupil and $18.96 per colored pupil.

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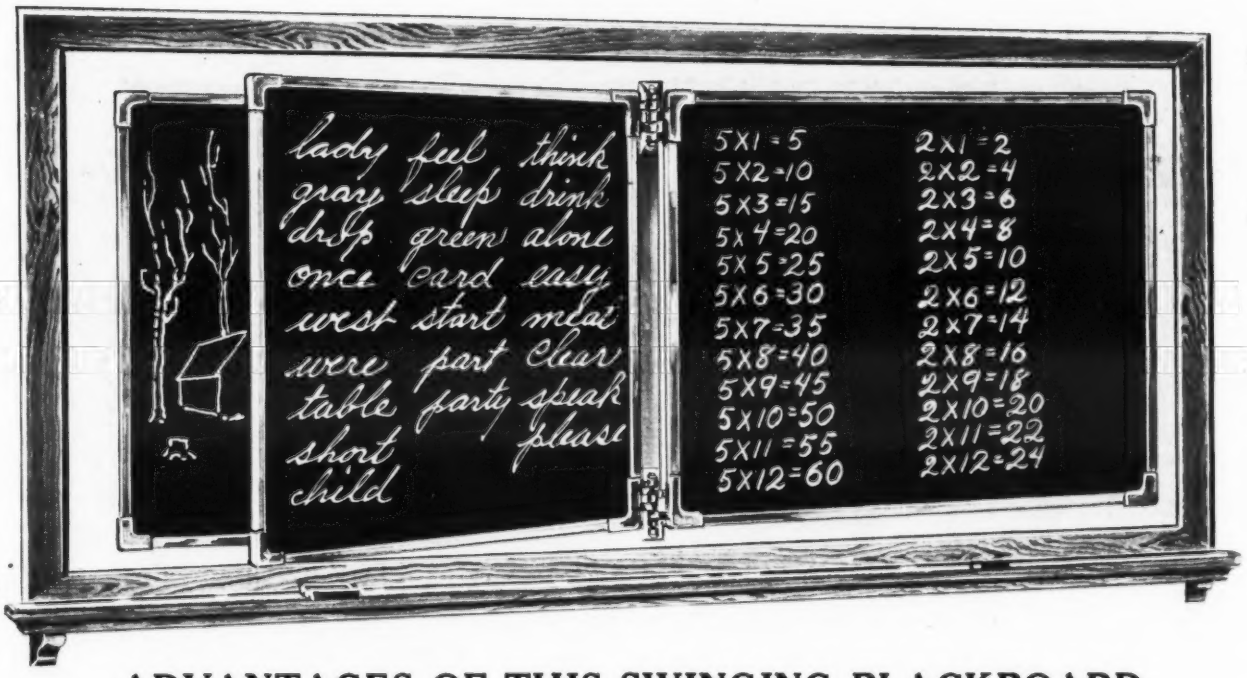

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CHICAGO CORRESPONDENCE

"Business" continues to attract expert educators from schoolwork to private enterprises. Recently Mr. Homer Davis, director of the bureau of building survey in the Chicago public schools, resigned to become educational adviser to the architectural firm of Perkins, Chatten, and Hammond. The $6,500 paid by the school board seemingly could not compete with the remuneration of the private firm. Mr. Davis had planned the change for several months but his retirement just now had had a peculiar psychological effect. During the mayoralty campaign, William Hale Thompson flayed him as a "so-called expert from Arizona" who was brought to Chicago by Superintendent McAndrew to show Chicagoans where to locate their school buildings. His resignation immediately after the election was hailed as a break in the McAndrew bulwarks.

Mr. Davis came to Chicago from the State Education Department of Arizona where he was director of research, to act as executive secretary to the Chicago Advisory School Plan Commission. Next he served as executive secretary of the local Educational Commission. Finally a Bureau of Building Survey was established and he was put in charge. Under his direction a typical standard plan was adopted for elementary, for junior high, and for senior high schools. Features of this plan were small initial units easily expanded, and two stories in height. His program also tended to synchronize the selection of sites and the erection of buildings in the community. It articulated with and paralleled the so-called Chicago Plan. During Mr. Davis' regime as director, 91 buildings and 65 sites were recommended to the board of education. Of these 71 buildings and 56 sites were approved; 20 buildings and 9 site recommendations are pending before the buildings and grounds committee; 11 site recommendations were withdrawn in the interest of conserving the school board's funds. A total of 75,000 seats were provided for school children during this period.

Spokesmen for the Thompson school-board faction have intimated that, henceforth, school buildings will be of the three-story type to reduce construction costs, and that playgrounds will be created on the roofs to conserve expensive ground play areas. The buildings constructed during the past four years have been financed on the pay-as-you-go plan; Chicago is growing at a rather constant rate of increase and school-building needs are fairly constant. The Chicago school system has no outstanding bonded indebtedness for school buildings. Now the plan, apparently advanced by the new mayor, is to have them financed solely by issuance of serial bonds.

In his campaign for election, Mayor William Hale Thompson made many charges against Superintendent of Schools William McAndrew. After the election, Mr. McAndrew requested an investigation of these charges, in a report to the school board in which he said:

"Your duty, under the law, 'to maintain a thorough and efficient system of free schools,' requires you to investigate and to correct, if found, serious abuses that may exist in the management and teaching of the schools.

"When criticisms come from so eminent an official as the mayor of the city, the matter is one requiring that there be no uncertainty with regard to the charges to be investigated."

Mr. McAndrew continues with excerpts from newspaper stories, quoting Thompson relative to his plan to purge the schools of King George-ism, restore patriotism and remove Supt. McAndrew.

MR. HOMER DAVIS,
Formerly Director of the Bureau of School-Building Surveys, Chicago, Ill.

One newspaper quotation from Thompson utterances in the McAndrew report gives prominence to an implied purpose on the part of the mayor to cause a federal investigation of the superintendent's alleged disloyalty. Another represents the superintendent as a pacifist. Following are some of the strongest Thompson campaign punches quoted in the report:

"And, while you're at it, tell the king he can have Supt. McAndrew back. We're through with him."

"The schools have fallen into the hands of a bunch of high-brow pro-Britishers, who are teaching the kiddies that Washington was a rebel and the king was our best friend."

"One of the first acts of my administration will be to oust Supt. McAndrew, who took the 'Spirit of '76' from the schoolroom wall."

"McAndrew is a stool pigeon of King George of England."

"These are sample statements, perused by thousands of readers. It is obvious that if true, they indicate a serious situation; if false, they do considerable harm."

Walter J. Raymer, Dever appointee, who took his office as school trustee after undergoing a severe attack by the aldermen in the city-council schools committee for three months, was recently elected president of the school board. Edgar N. Greenebaum, Dever appointee, with two years of his term to run, cabled his resignation from France. Walter H. Brandenburg, plastering contractor, and James A. Hemmingway, attorney and former secretary of the Foreman Trust and Savings Bank, are newly-appointed trustees. Mayor Thompson submitted their names to the council and they were confirmed at once by suspending the rules without any committee action on them. Mrs. Gregg, former mayoralty candidate who threw her support to Dr. John Dill Robertson in the recent election, is reported in the newspapers to have promised support to the mayor and will be reappointed. The personnel of the school board is seven Dever appointees, and four Thompson appointees, including Mrs. Gregg. Report is current that two Dever appointees have agreed to go along with the mayor, giving him a 6 to 5 control. In fact, the newspapers have stated that a plan is under way, if the mayor can control 6 votes, to replace the present board president on May 25th, and at the same meeting, suspend Supt. McAndrew on charges. A temporary acting-super-

intendent may be put in his place, after which charges against Mr. McAndrew will not be pressed until January, at the expiration of his term, and then they will be dropped after paying him his back salary. Friends of the superintendent are said to be skirmishing around to prevent this.

It is evident that the school board wishes to preserve harmony with the new city administration, although no overt action has been taken toward ousting the superintendent. At the personal request of the new president, Mr. Raymer, Superintendent McAndrew withdrew his request for an investigation of the Thompson charges aforementioned.

The Chicago newspapers quoted one of the Thompson school-board appointees as having offered Mr. McAndrew $15,000 to quit. The superintendent would forfeit about $11,000 of salary between now and February 1, 1928.

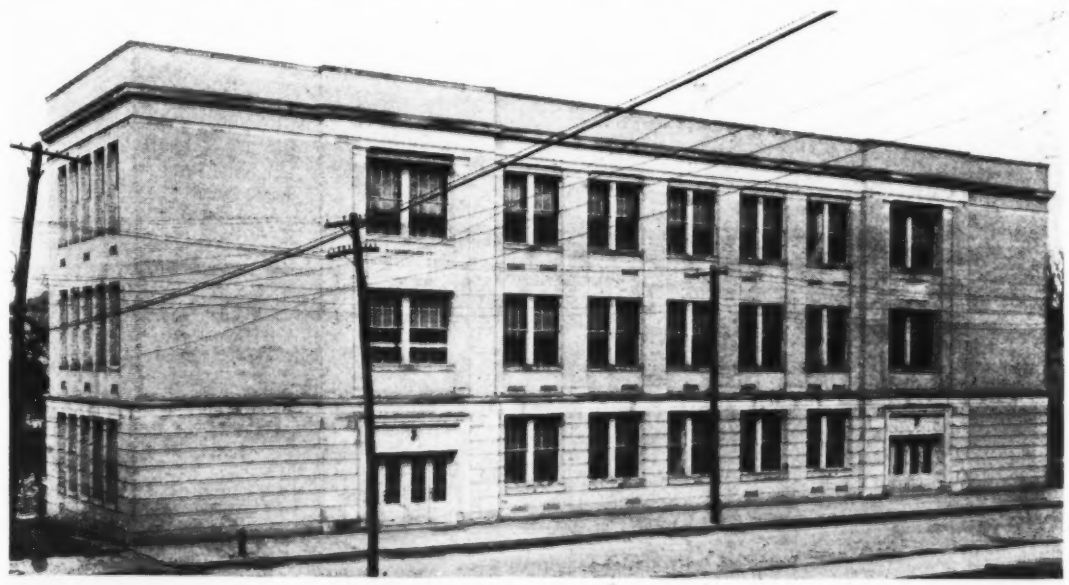
On April 28th more than one hundred prominent business men and leaders of civic associations met at the Union League Club rooms and organized a Citizens' Commission to promote greater efficiency in school relations. Such a body has been planned for many months. The chairman announced, "The administration of our schools in Chicago has not been thorough and efficient at all times, but on the other hand has been full of bickerings and broils and has brought discredit to our city. We don't want to see our educational system go to smash."

Among the associations represented at the first meeting were: Chicago Association of Commerce, Chicago Real Estate Club, Commercial Club, Hamilton Club, Union League Club, Western Society of Engineers, Illinois League of Women Voters, Woman's City Club, Chicago Woman's Club, City Club, and others.

On April 27, the school board adopted a resolution calling upon the City Council to permit a referendum on the question of increasing the educational fund tax rate from $1.92 to $2.42 per $100 of assessed valuation, the vote to be taken at the judicial election in June. The reasons urging the necessity for this 50-cent increase were: 1. There are insufficient funds in sight now to run the schools during January and February, 1928. 2. When additional funds are available, it is proposed to adjust the teachers' salaries.

The Chicago Teachers' Federation and apparently a majority of the city council have favored an increase in assessed valuations and have opposed the tax rate increase. The Chicago Principals' Club, though hoping for favorable results from an assessment drive, has been urging a levy increase. This angered some of the aldermen on the schools committee, and two resolutions were adopted by the city council against the Principals' Club for its "Service Bulletins," and against Don C. Rogers, principal of the Smyth school, for his talks before parent-teacher associations. However, in spite of the fact that considerable energy and $70,000 was spent on an assessment drive, there were less increased assessments in 1926 by $32,000,000 than the average amount of increase for each of the past ten years without a "drive." Confirmation of the soundness of the principals' club stand is seen in the recent resolution of the school board asking for a levy increase. However, the schools committee of the city council is still unconvinced. The committee rejected the proposition by a vote of 10 to 1. Individual aldermen proposed that it would be necessary to close the schools the month of January, 1928, or else reduce teachers' salaries. Another proposal has been made that the present building fund levy of $1 per $100 of assessed valuation be split 50-50 with the city and the educational fund, and that school buildings be erected by issuance of bonds.

Such a plan would reduce school-board income by about $8,500,000 a year and would add greatly to the ultimate cost of school buildings to pay for them by bonding—at a time when school finances are in straitened circumstances as it is. Such a proposal would require legislation by the general assembly.



GRADE SCHOOL, WESTON, W. Va. E. J. Wood & Son, Architects, Clarksburg, W. Va.

The accompanying illustration of the new grade-school building at Weston, W. Va., is that of a building erected entirely without the issuance of bonds or other extraordinary forms of taxation. The building is simply the result of careful anticipation of needs on the part of the school administration. The land on which the building stands was purchased at a cost of $35,000 from moneys received during a period of four years through the regular school-tax levy. The amount needed was especially anticipated in the budget.

The building was erected at a cost of $60,000 and was also paid for from regular school funds received during the four years mentioned. The sum of $20,000 will be spent by the board to complete the equipment in the building.

It is planned ultimately to enlarge the building to 34 classrooms. The board will finance each unit as needed by direct tax levies.

CHATS DURING RECESS

—The Charleston, W. Va., *Gazette*, in discussing the Jividen bill, which seeks to change the school board and thereby bring it near partisan politics, is reminded of the story of General Anthony Wayne. "At a dinner given to the Indian fighter after his successful campaign against the Indians, he saw on the table some beautiful red peppers, very enticing to the eye of one craving delicacies. He picked up one and conveyed it to his mouth and came down upon it with healthy, strong molars. Soon it responded to vigorous mastication, till it appeared to the general as if he were chewing a live hornet's nest dressed with cayenne pepper and cockle burrs. His face reddened and his eyes watered, but neither the host nor any guest would dare to advise the hero of Falling Timbers, and 'at such a time.' General Wayne, just before the point of explosion was reached, removed the red-hot pepper from his mouth and returned it to the dish, saying: 'Ladies and gentlemen, with your permission, I will lay that pesky little red berry right back where I got it.' The Jividen Bill is the pepper pod. They did not know that it was hot and loaded."

—Newspaper Item: Over in Dawson township, Greene county, Iowa, an election was held to decide on the issuance of bonds to build a new schoolhouse. They may have needed the building or not. The question was to bond or not to bond the township to that purpose.

Now this is good: The election board met properly, opened the polls, kept them open the entire time, received and counted the three ballots cast out of 300 eligible voters in the township. The three were all favorable to the bond issue. That was all for the day. The three voters bonded the township all right. Silence gives consent and the silence of the other 297 consented. Their absence from the polls is an evidence of agreement. If they didn't borrow the money themselves they signed the note.

But try to imagine an important election the result of which directly concerned taxation where out of 300 voters one per cent of the vote is cast.

—C. A. Howard, state superintendent, in a public address, recently said: "Intellectual honesty is a fundamental of education. In these days of service clubs and radio, public speaking has again come into its own. Conditions are right for the development of the biggest crop of public liars the world has ever known."

—When Annie Louise Keller, in a one-room school in Greene county, Illinois, saw the coming storm, she divined its meaning. Nothing in the books of pedagogy she had read, nothing in the lectures she had taken in institutes and institutions of learning had dealt directly with such a situation. However, her entire training and experience had given her the power of command, the presence of mind, the courage to meet emergencies which arose on every hand in almost every day of her school work. How simple it must have seemed to her just before the crash of the storm to say in that commanding, but reassuring way to her children, "Crawl under your desks and stay there." How simple and natural it must have seemed to her as the responsible person, as the only one present who could care for them, to stand by the door while all the children were crouched beneath the desks, quieting their fears with her presence and encouraging words. The storm broke, the brick building was practically demolished, the brick piling high upon the desks above the children's bodies, but without a single child being hurt; but those tumbling, hurling bricks piled high upon the body of the teacher crushing out her life. No soldier on the battlefield ever met a great crisis more nobly, more bravely than she. No patriot celebrated in history and song is more deserving than she of all the praise that her act has brought to her name.—*F. G. Blair.*

—The Chicago *Tribune* in a recent issue says: "The Chicago aldermen are a pretty fair lot of men, as aldermen go, if a further qualification is insisted upon, but sometimes some of them do not mind cheap-skating themselves a little for such good as they may think accrues to them thereby. Some in the school committee did in the discussion over Supt. McAndrew, clowning themselves with their criticism, not the superintendent. He probably is not thin-skinned and may not mind the aldermanic turn of wit and derision, but we doubt that it is good for better pedagogy in the city to make it apparent that any man who takes an important position in the Chicago schools may expect at any time to get a volley of mud balls from the supervisors of the schools for which he is hired."

—New York newspaper editorial: "Charges of a British plot to annex the United States and of King George's tampering with American school textbooks for such an end are being solemnly heard by the Chicago Board of Education. They originated with Mayor Thompson and his campaign to get back into that office, and they have for their immediate purpose the removal of Superintendent of Schools William McAndrew, who is blamed for it all, and as promised by Thompson. Such are the earliest fruits of Mayor Thompson's election on a campaign of the most driveling demagogy that ever stirred a madhouse. What pride must be Chicago's!"

—At Pottsville, Pa., a school-bond-issue campaign has broadcasted the slogan: "If Pottsville can have a million-dollar hotel, it should have a million-dollar high school." And then the local editor punctures the whole thing in the following language: "In the construction of the municipal hotel every dollar is being weighed carefully and not one penny is being wasted in any way. There are no politicians to serve; no hands to be greased. When bids are opened and bids are found too high the specifications are broken up and the goods purchased separately and the work done by men employed at the regular per-day rate. You never heard of anybody proposing doing anything like this with the proposed million-dollar high school."

—"The fan system is the only means of securing uniform ventilation," said Edwin S. Hallett, chief engineer of the school system of St. Louis, Mo. "The air washer is the best means of controlling humidity and the only means of removing sulphur fumes of soft coal and the carbon monoxide of automobile exhaust and with the air filter the effective means of removing the dust and bacteria of the air. The only means of removing odors from schools is the introduction of low concentration ozone. The net result of all these conditioning measures is the production of an atmosphere as pleasing as the outdoors of the pleasure spots of the world."

A New Kind of Service

The following post card is said to have been issued by a schoolboy in Cleveland, Ohio, and was first reproduced in the Cleveland Welfare Federation Bulletin. It tells its own story.

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Personal Escorter
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to school and returned
prompt in perfect con-
dishion if received that
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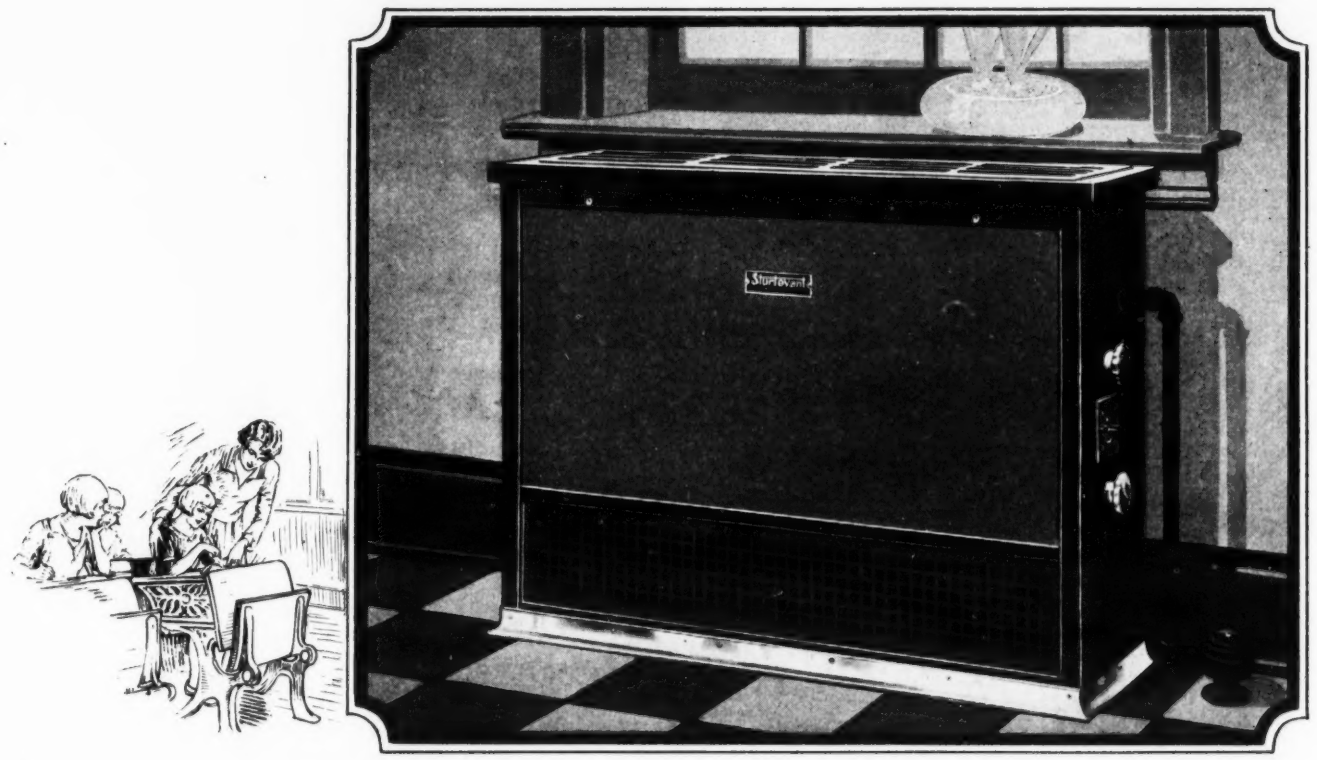
rates to twins. Refined
conversashion. No extry
charge for nose wipin.
All I ast is a trial.



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HEAT *and* VENTILATION

WHAT DOES THE SUPERINTENDENT LOOK FOR ON HIS VISITS?

I. T. Simley, South St. Paul, Minn.

It is a maxim of good pedagogy that not only the teacher but also the pupils must know the assignment and what is expected of them in the various classroom activities. Only in this way can the pupils be expected intelligently "to plan their work and work their plan." Just as the teacher is under obligation to the pupils to let them know in advance what her requirements and standards are, so is the superintendent or supervisor or principal under obligation to the teachers to let them know in advance what he plans to measure and what yard stick he will use in his evaluation of their work. Diagnosis or evaluation is the first step leading toward the improvement of instruction.

To meet this responsibility of superintendent to teacher, the writer has prepared a bulletin on the subject under the caption which forms the heading of this article. The bulletin was mimeographed and a copy sent to each teacher, from kindergarten to grade supervisor and high-school principal. The bulletin was then discussed at a general teachers' meeting.

The bulletin, it will be noticed, follows closely and is an analysis of the following visitation steps:

I. The superintendent steps into the room and gets a first general impression.

II. He finds a seat, sits down, and analyzes the activities of the hour.

III. He draws his conclusions and gets data for a conference and for further procedure.

SOUTH ST. PAUL PUBLIC SCHOOLS
Bulletin to Teachers

What Does the Superintendent Look for on His Visits?

"O wad some Power the giftie gie us
To see oursels as ithers see us!"—*Burns.*

Pardon the "ego," but you are entitled to know what I see when I pay you my visits. I can't give you my "eyes," but I can at least tell you how they are focused. The skeleton outline below is intended to serve this purpose.

I. First general impression (practically instantaneous)
  A. The physical equipment and environment
    1. Is the room attractive—neat housekeeping?
      a. Wall decorations including flag, pictures, maps, display materials, etc., neatly and properly arranged?
      b. Is the floor free from paper and other extraneous materials?
      c. Are the desks—teacher's and pupils'—tidily kept? (And, by the way, would they bear internal inspection?)
      d. Are the cupboards and cabinets in order?
      What is on the blackboards and *how* is it on?
  B. Evidence of attention to physical conditions
    1. Temperature (in some of our rooms at least, the radiators have valves).
    2. Ventilation (attention to the extent of the teacher's control).
    3. Light
      a. Are the shades used?
      b. Does the teacher stand at the window side of the room and compel the pupils to look right into the light in order to see her? (This is put negatively for the sake of emphasis.)
      c. Has the light been taken into consideration in the placement of the teacher's desk?
    4. Seating
      a. Has attention been given to proper seating?
      b. Are correct positions maintained?
  C. The psychological atmosphere
    1. Are teacher and pupils enjoying the work?
    2. Are all—or most—pupils participating in the work? (Cf. Teacher doing the work?)
    3. Is there willing and interested application to duty or is there an air of compulsion?

II. Analysis of the activities of the hour
  A. Is the purpose of the activity apparent?
    1. Can I tell without being told where the class is going?
    2. Does the *class itself* seemingly know where it is going?
  B. Is the purpose definite?
    1. Is it delimited?
  C. Has the purpose proper magnitude?
    1. Is it within the comprehension of pupils?
    2. Is it of sufficient difficulty to challenge the *best* ability of the class?
    3. Is it easy enough and small enough to be possible of mastery?
  D. Has the purpose seemingly been accepted by the class?
    1. Is the class working intelligently?
    2. Is the class working cooperatively?
    3. Is the class working enthusiastically?

III. Evaluation of the activities of the hour
  A. Was the purpose or aim accomplished?
    1. Did the teacher guide to a logical and reasonably complete summarization and conclusion?
    2. Did the pupils—the *pupils, mind you*—demonstrate or prove the accomplishment of the purpose?
    3. Was it poorly, fairly, or excellently done?
  B. Was the purpose worthy?
    1. Did it have educational value?
    2. Did it meet some pupil need?
    3. Was it properly motivated?
    4. Was it made *real* or "academic" and "bookish"?
  C. Was a clear, definite, and reasonable assignment made for the next recitation?
    1. Did the pupils know what the next assignment was?
      a. How did the teacher know they knew?
    2. Was the assignment logically led up to?
    3. Did the pupils share the purpose of the assignment?
      a. Did they propose the assignment? *Or*
      b. Did they heartily accept it? (Accept vs. tolerate.)
    4. Was it reasonable of accomplishment?
      a. Was it too short—tending to encourage loafing?
      b. Was it too long—encouraging slovenly work or discouragement?
      c. Was any provision made for individual differences?

I. T. SIMLEY, *Superintendent.*

—James Buchanan and T. E. Padgett are the new members of the Mountainview, Mo., school board. L. V. Thomason was elected president.

—The new members of the Peoria, Ill., school board are: Clarence Heyl, Ben Bloch, and Dr. Bernard Heymann.

—F. G. Edwards was reappointed superintendent of schools at Marseilles, Illinois. B. U. Stebbins was relected secretary of the school board.

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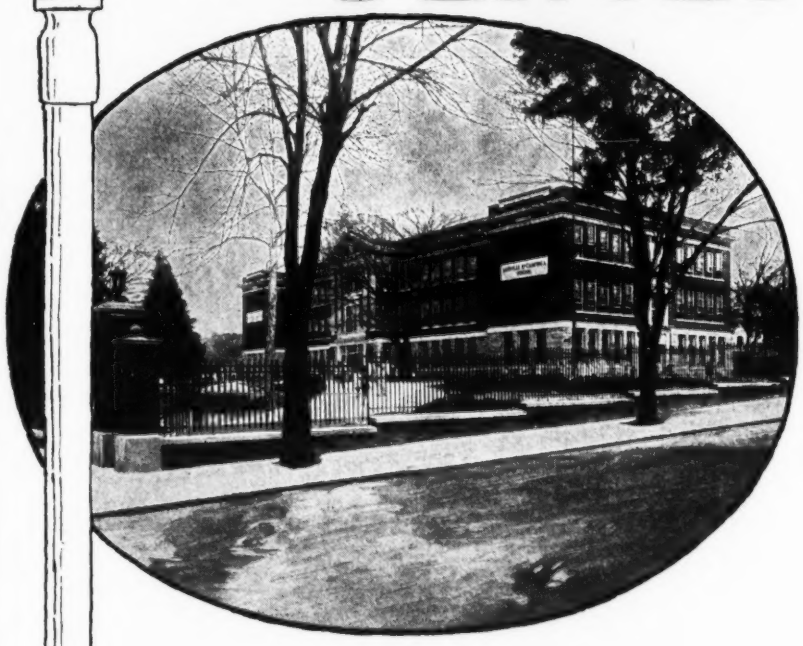

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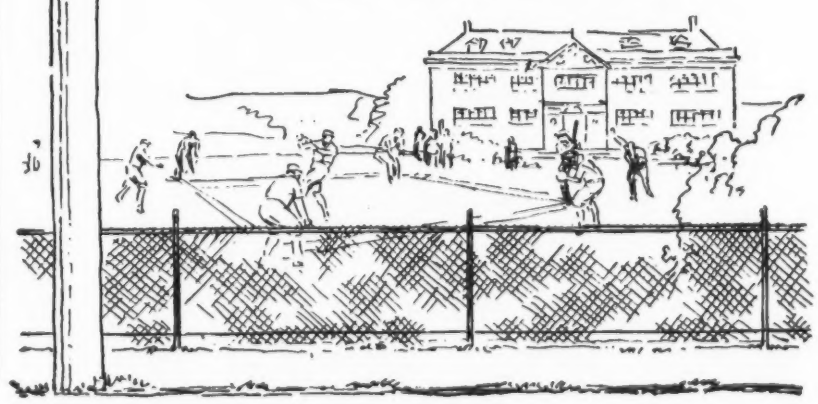

THE SCIENTIFIC SUPERVISION OF TEACHERS' MARKS

(Concluded from Page 54)

Of course where classes are small or are abnormal, the distribution must be applied in modified form.

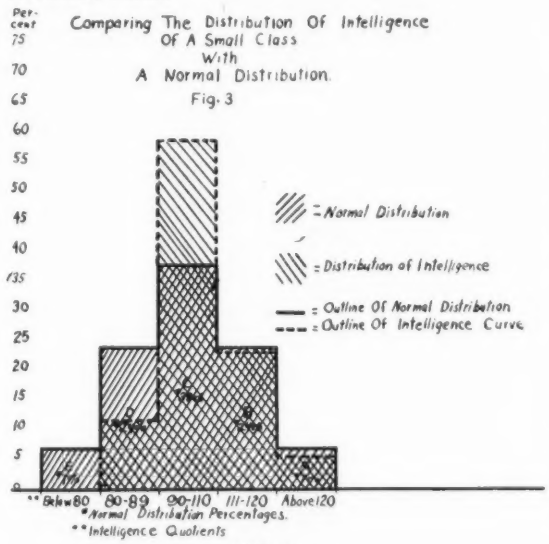

FIG. 3.

A graphical distribution showing the class intelligence is a very material aid to the teacher's judgment. Figure 3 shows such a distribution. This class contains only seventeen pupils. The intelligence of the class is above normal and the teacher would expect a larger percentage of marks above average; other factors being constant.

The plan of examining and assigning marks, herein described, makes use of the scientific devices now available to aid teachers' judgments in the assignment of marks. Nearly four years' successful use of the plan by a faculty of twenty high-school teachers at Painesville has proved it to be entirely practical.

SOME FACTORS DETERMINING TYPES OF SCHOOL-BUILDING FLOOR PLANS

(Continued from Page 66)

TABLE 17—Roof Type and Number of Floors
(Showing Percentages of Plans)

	1 Floor (29 Plans)	2 Floors (80 Plans)	3 Floors (144 Plans)	4 Floors and over (37 Plans)
Flat	7%	45%	77%	97%
Mixed	17%	1%	5%	0%
Slant	76%	54%	18%	3%

9. *Floor-plan type and basement.* It is generally maintained that basements are disappearing from the plans of modern school buildings; at least for classroom and other educational purposes. Of the 290 plans here studied, 141, or 48 per cent, included basements. The number of these basements that were intended to house the heating plant and storage rooms only, was not recorded. Doubtless it was considerable.

Table 18 shows that the closed type of plan is more likely to include a basement than is the open type. Table 19 indicates that the basement is more likely to accompany a flat than a slant roof. Table 20 shows that a two-story building is most likely to be erected upon a basement, with a three-story building coming next. There also appears to be a geographical factor, in that eastern and central buildings are considerably more likely to have a basement than are those in the south and west. All of these facts may, however, simply reflect the relation to the closed plans.

TABLE 18—Basement and Floor-Plan

	Total Plans	Number with Basement	Per cent with Basement
Closed	98	55	56
Semiclosed	44	26	59
Open	148	60	40

TABLE 19—Basement and Roof-Type

	Total Plans	Number with Basement	Per cent with Basement
Flat	185	106	57
Mixed	13	4	31
Slant	92	31	34

TABLE 20—Basement and Number of Stories

	Total Plans	Number with Basement	Per cent with Basement
One story	43	14	33
Two stories	165	95	58
Three stories	75	30	40
Four and over	7	2	29

10. *Subdivision of the open-type plan.* Table 21 shows a distribution of the 148 open-type plans included in this study into their various outstanding subtypes. These subtypes are represented by the capital letters which the plans most resemble. The "miscellaneous" group includes a number that are irregular and unclassifiable, and a very few "V"-type, bar-type, and open-rectangle-type plans.

TABLE 21—Kinds of Open Plans
(148 Plans)

Kinds	Number	Per Cent
T	49	33
U	23	16
L	20	14
E	19	13
H	13	8
Misc.	24	16

The "T" subtype leads by a decided majority. This fact is explained at least in part by Table 22, where the "T" and "L" subtypes are seen to be more common in the more compact buildings with fewer than 8 rooms per floor.

11. *Summary.* To the extent that the plans reported in this study are representative of modern school-building plans, the following statements seem warranted by the relations revealed in these pages:

TABLE 22—Open Subtypes and Rooms per Floor

	T (49 Plans)	U (23 Plans)	L (20 Plans)	E (19 Plans)	H (13 Plans)	Misc. (24 Plans)
2- 5 rooms (31)	31%	4%	30%	16%	15%	17%
6-10 rooms (71)	53%	65%	35%	42%	46%	37%
11-15 rooms (27)	12%	18%	30%	26%	15%	17%
16-20 rooms (15)	2%	13%	5%	5%	24%	25%
Over 20 rooms (4)	2%	0%	0%	11%	0%	4%
Median	7 rooms	9 rooms	7 rooms	3 rooms	10 rooms	10 rooms

(1) The number of rooms per floor seems to be a decisive factor in determining whether or not a building shall be of the open or closed type. Geographical location and population may affect the matter somewhat. That is to say, the chances that a building will be of the open type increase in quantity with the number of rooms per floor, and possibly also with increase in population, and with the location of the proposed building in the south or west. It is impossible to say that the other factors studied here do not exercise an influence, but it also cannot be asserted that they do.

(2) Roof type is mainly determined by the number of floors that the roof is expected to cover; the greater that number, the greater being the probability of a flat roof.

(3) Basements are most likely to be found in two- and three-story buildings, and most frequently accompanying flat roofs and plans of the closed type.

(4) Of open-type buildings, the T and L forms are preferred for those with relatively few rooms per floor, and the U, E, and H forms for larger buildings.

FUNDAMENTAL ELEMENTS IN THE TRAINING OF SCHOOL JANITORS

(Concluded from Page 52)

edge, and vision. We can only succeed with them, as they themselves wish to succeed. The intent to learn is what teaches.

(f) Precise practice with satisfaction is the key to the situation.

4. Any course must be practical, and the learner should be taught to do better, the desirable janitorial tasks he is going to be called on to do anyway.

(a) The mechanics and fundamental laws underlying heating, lighting, ventilating, cleaning, etc., so he gets a broad view of his duties, and sees clearly why certain devices, methods and equipment are to be used in preference to others.

5. Any plan for training of janitors, to be successful, must be subordinate to educational authority of the school system.

6. Any plan that is not founded on a sound financial basis but depends on mere whims and novelties of the advertisers, is doomed, sooner or later, to failure.

It would be difficult to set forth an ideal plan, as any plan, to be a success, must not only include the above elements, but must take into account the local conditions. Thus, in a large city, a plan based on the above principles and extending throughout an entire year would be desirable, whereas, in the training of janitors in small towns and rural schools, such a plan would not be feasible. Perhaps in these places, it would be better, through the cooperation of business interests and other educational authorities, to have some kind of a county institute for school custodians and janitors, extending over three or four days. If properly organized, such a meeting would afford an opportunity of bringing together the school janitors from many local districts, for the purpose of making demonstrations and observations under guidance. Such an institute would afford an opportunity for carrying out properly planned programs where the fundamentals of this work could be presented and projects planned, so as to allow for observation, demonstration and participation in the desirable methods and procedures by all individuals concerned.

Thus in each particular case, certain details will be necessary to fit immediate local conditions, depending on the facts, but when such local facts and conditions are taken into account, then the success of any plan depends on the fundamental principles and elements we have tried to point out.

RECENT SCHOOL-BUILDING ACTIVITY IN SEATTLE

(Concluded from Page 64)

year, September 3, 1923. A total of sixteen months was devoted to the construction work.

The new building program, which it is estimated will require two years for its completion, will house approximately 5,000 pupils. It is expected to provide additions to three high schools, one new intermediate school, two elementary schools, a building for the deaf and sight-saving classes, and additions to seven elementary schools.

DEATH OF DR. SWAIN

Dr. Joseph Swain, president-emeritus of Swarthmore College, Pennsylvania, who died on May 19, was noted for his constructive work in educational organizations and for his fine administratitve labors in connection with the financing and expansion of the Quaker college. He was 70 years old at the time of death.

Dr. Swain was graduated from Indiana University in 1883, and then spent two years as a teacher and graduate student. He studied a year at the University of Edinburgh and in 1886 returned to the University as professor of mathematics. Five years later he accepted a position at Stanford University, but in 1893 he returned to head the University of his undergraduate days.

He went to Swarthmore College with the understanding that he was to be allowed to put his financial and expansion plans into practice and the subsequent growth of the College showed the wisdom of the requirement. During his presidency, the endowment was increased from $360,000 to $2,225,000, additions were built to every building on the campus, new departments were added, and a president's home was erected.

Dr. Swain retired in June, 1921, because of failing health but a world tour and a winter in the south worked an improvement in his health. Early last year he suffered a second breakdown and since then he had been inactive and steadily losing strength.

Dr. Swain was a past president of the National Education Association and the National Council of Education. The degree of doctor of literature was conferred on him by Wabash College, Lafayette College, the University of Pennsylvania, and Indiana University. He was a frequent contributor to the publications of the Smithsonian Institution.

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Effective Factors in the Growth of Teachers in Service

(Concluded from Page 42)

6. Additional salary for merit..... 52
7. Enrollment in extension or correspondence courses 46
8. Regular general teachers' meetings..... 27
9. Reading professional literature..... 27
10. Summer-school attendance..... 24
11. Curriculum making 20
12. Measurements of results of teaching with remedial suggestions 18
13. Teachers' club or council..... 14
14. Attendance at teachers' associations..... 14
15. Supervisory bulletins 13
16. Lectures by educational leaders..... 13
17. Demonstration by other teachers..... 10
18. Demonstration by supervisors..... 10
19. Administrative participation 8
20. Visiting other teachers..... 8
21. Appeals to group emulation..... 8
22. Single salary schedule..... 7

The plan of greatest frequency, the pension or retirement plan reported by 90 per cent of these systems, is found to be, in all but 6 cases out of 63, a state plan.

When the plans reported for determining salary on the basis of merit were distributed in terms of four methods of measuring teaching success, it was found that in 20 of the 52 per cent of systems so reporting some form of score card was used, in 7 a self-rating scale was handed to teachers, in 7 judgments were frankly subjective, and in 16 rating was in terms of credits gained in professional study.

It will be noticed that only 8 per cent of the smaller systems are trying to relate the salary schedule to teaching merit, and in this respect the larger systems are distinctly in the lead. This is very probably an indication as to where improvement may be expected. It is possible that in the typical small city the "superintendent" is simply the only male teacher and that one or two aggressive board members perform all necessary administrative and even supervisory duties. It is certain that, as one goes up the scale of improvement in a proper separation of business from professional functions, the board is found giving over to the superintendent last of all the purse strings of the district treasury. That such improvement correlates with the size of the system is indicated so far as the salary schedule is concerned.

When the methods of securing the improvement of teachers in service reported from both small and large systems are thrown together, the fourteen items given in Table III are found to be common. These frequencies, as found in columns 3 and 4, are found to correlate very well in schools of two sizes, except, perhaps, in the case of six items.

The difference in practice in the matter of salary for merit (item 6) has been mentioned. Item 4.5a shows that a larger proportion of superintendents in smaller systems are requiring regular reading on the part of their teachers. Item 4.5b points to the fact that larger systems are giving up the traditional general teachers' meetings at regular intervals faster than are the smaller systems. This difference may not be so unfavorable to smaller systems as it seems, as many of the superintendents there report that these general meetings are highly professional as to activities carried on, the small size of the faculty making it possible for them to work as a committee of the whole.

Item 9 reports more superintendents in small systems arranging visiting activities for their teachers. On the face of the returns this seems fine, but teacher visitation to be valuable must be very carefully managed, and it may be that the small-system-school-superintendent does not fully understand as yet just what his technic should be in this respect. The writer well remembers how complacent he felt in his first superintendency after having persuaded the board of education to give visting days to the

TABLE III

FOURTEEN METHODS OF IMPROVING TEACHERS IN SERVICE USED BY BOTH LARGER AND SMALLER CITY SCHOOL SYSTEMS (PER CENTS)

Combined Rank	Item	Frequency in Small Systems	Frequency in Large Systems
1	2	3	4
1	Personal conference	59	62
2	Visitation by superior officer.	53	62
3	Group conferences on specific problems	44	59
4.5a	Reading educational literature	56	27
4.5b	General regular teachers' meetings	53	27
6	Additional salary for merit..	8	52
7	Enrollment in extension or correspondence courses	12	46
8	Measuring the results of teaching	14	18
9	Visiting other teachers.....	21	8
10	Supervisory bulletins	14	13
11	Attendance at teachers' associations	12	14
12	Demonstration teaching.....	14	10
13	Curriculum making	12	20
14	Appeals to group emulation..	6	8

A Two-Fold Ranking by the Faculty of a Teachers' College of the Twenty-Four Methods of Improving Teachers in Service Used by Public-School Systems Reporting

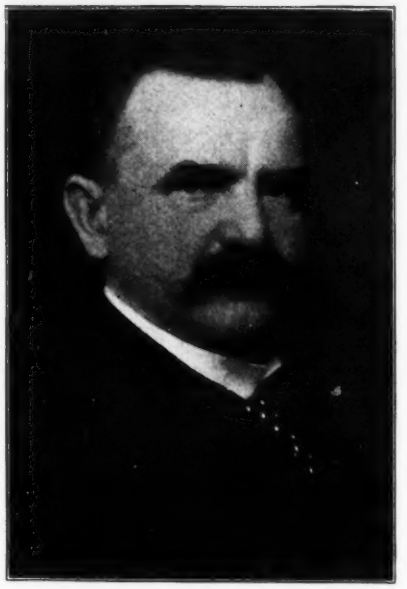
I. Better Methods:
1. Demonstration teaching.
2. Single salary schedule.
3. Supervision.
4. Assignment to special educational projects.
5. Group conferences on specific problems.
6. Measuring the results of teaching with remedial suggestions.
7. Visiting other teachers.
8. Administrative participation.
9. Enrollment in extension or correspondence courses.
10. Summer-school attendance.
11. Curriculum making.
12. Supervisory bulletins.
13. Additional salary for merit.
14. Teachers' club or council.
15 Lectures by educational leaders.
16. Teacher-rating plan.
17. Pension or retirement plan.

II. Poorer Methods:
1. Attendance at teachers' associations.
2. Reading educational literature.
3. Personal conference.
4. Checking teachers' methods.
5. Visitation by superior officer.
6. Regular general teachers' meetings.
7. Appeals to group emulation.

these visits, as he had not made detailed arrangements as to just what teachers should be visited, nor had he insured capitalization of value received by requiring reports to the faculty upon return. And, in one case, the president of the board of education informed him that it was reported that a teacher sent to Milwaukee to visit the public schools had used a major part of her time shopping.

Item 7 shows another discrepancy in frequency, and here very probably opportunity operated in the matter of extension enrollment, as the larger city more often is near the state university or other center of higher professional work. However, one may suspect that there is a real difference in levels of professional attitude also. Possibly the typical small-town-teacher is younger, actuated by no long-time professional objectives, and very willing to let the small cistern of information and the tiny dynamo of skills brought from the teachers' college suffice for the year or two he intends to teach. Very often he is handling his first salary money, also, and unskilled spending leaves little for either extension or correspondence fees.

Finally, the sixth difference is found in item 13. The proportion of larger systems engaging in curriculum making programs for the purpose of improving their teaching corps is nearly twice as great among large as among small systems. This must be expected, I suppose. Wider opportunities because of a larger and more experienced teaching force, a greater degree of professional prestige and control, and hence more fluid budget conditions will inevitably favor definitely organized curriculum-revision departments in such large city situations as Denver,



DR. JOSEPH SWAIN,
President-Emeritus of Swarthmore College, Pa.
Died, May 17, 1927.
(See Page 150.)

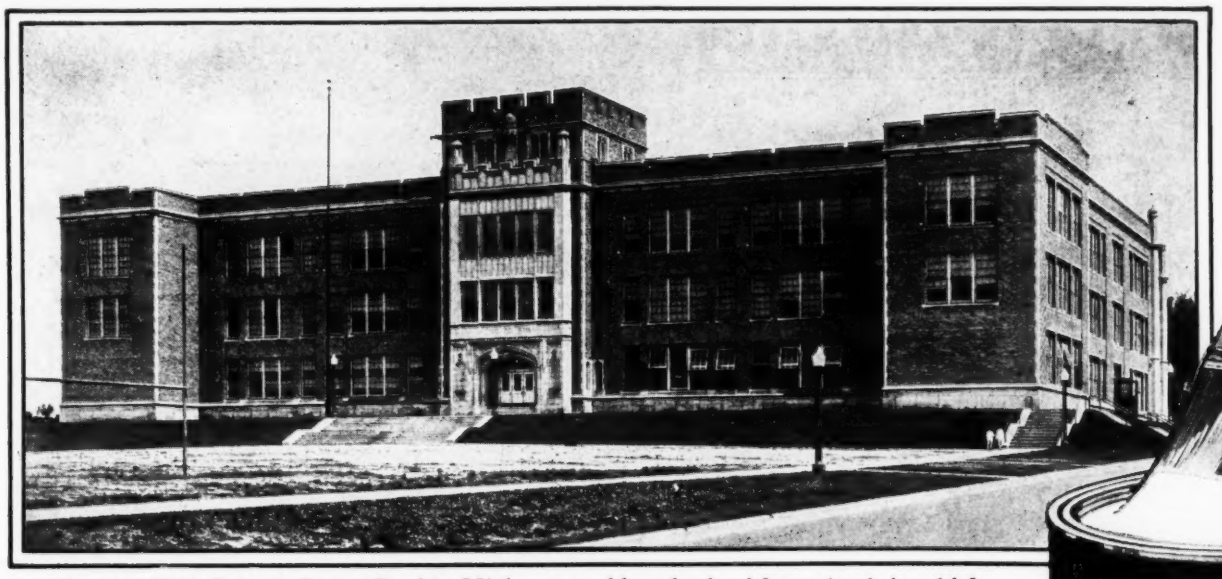
Kansas City, Minneapolis, San Antonio, Texas, Los Angeles, and doubtless in many other California cities. Here, as throughout the history of the development of professionalization in American public-school education, the larger systems lead and practices and principles emerging from their experience appear later in smaller situations.

As with teacher-rating schemes above, an attempt has been made, at the bottom of Table III, to rank items of technic employed in the improvement of teachers in service as better and poorer. If any one wishes to check this two-fold ranking with his own judgment as to relative values, he should know that each method mentioned is regarded, not in the light of the degree to which it *should* affect the growth of teachers nor as it *may* later do so under more favorable circumstances, but as it very probably works in the typical situation now. For example, I believe that teacher rating ought to operate so surely in accordance with the laws of learning that teachers would invariably improve under such a regime. But, we are still in the twilight of the dark ages, so far as our understanding of good methods of measuring teaching ability are concerned. Our tools are dull and clumsy. For this reason the item "teacher-rating plan" is placed in the lower part of the upper list near to poorer methods.

Conclusion

It is not worth while to compute a coefficient, but if you remember the list of methods of motivating the efforts of teachers toward growth reported from both the smaller and larger systems, and the list of items of technic common to both, you will recognize that they are tipped upside down in this rank order list. If you agree on the whole with this two-fold ranking, the reports of actual methods will appear in many cases as illustrations of how not to do it. The superintendent of schools cannot at once come to such a conclusion, however. He must reach his own generalization as to proper values in the light of the specific needs of his own system. It may be that a method which he would agree was poorer would be best for his peculiar situation and for the present.

This brief and inadequate statement has attempted to defend the thesis that the teacher-training institution and the public-school system must assume joint responsibility and must cooperate on a professional level for the improvement of teachers in service. The method of discussion has been that of illustration largely. teachers, but how chagrin followed several of



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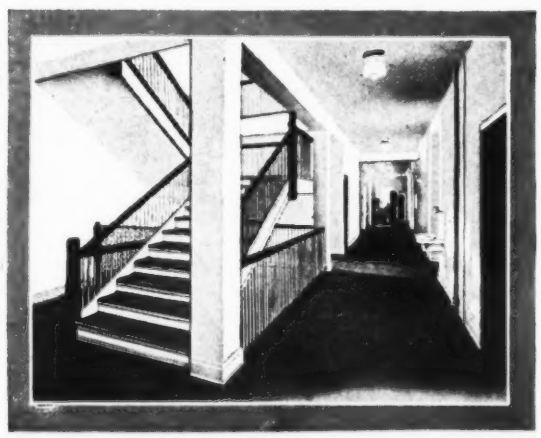

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City ..... State .....

MEASURING SCHOOL-BOARD CANDIDATES

(Concluded from Page 40)

III. *Official Duties of School-Board Members*
1. Works harmoniously, yields to majority, not wrangling .....
2. Assumes just share of work and responsibility, not a "loafer" nor "side-stepper"...
3. Regular and prompt in attendance at board meetings, not irregular nor tardy...
4. Keeps school records neat, complete and accurate, not poorly kept, incomplete and inaccurate .....
5. Provides proper teachers, buildings, grounds, repairs, equipment, not wasteful nor miserly .....

IV. *Community Relations*
1. Public spirited, patriotic, not selfish.....
2. Cooperates with neighbors, not exclusive nor snobbish .....
3. Is established in the community, not frequently moving .....
4. Discusses school affairs judiciously, not "gossipy" .....
5. Represents entire community, not a group nor a faction.....
6. Believes in parent-teacher association or similar organization and schoolhouse as social center, not cold toward social functions .....
7. Budgets school expense carefully, not failing to consider wealth and community resources .....
8. Recognizes proper education as a valuable investment, not as a "gold-brick" speculation .....
9. Others trust him, not lacking in community confidence .....

V. *Relations With Superintendent*
1. Hires teachers only on recommendation of superintendent, not risking his own judgment .....
2. Buys supplies after consulting superintendent, not using judgment which requires professional knowledge.....
3. Makes all official reports carefully and promptly, not inaccurate nor tardy.....

VI. *Relations With Teachers and School*
1. Places school efficiency above reduction in taxes .....
2. Is a school patron and not without an active interest in school affairs.....
3. Hires teachers on efficiency, not influenced by religion, kinship, nor political "pull"...
4. Believes in efficient rural teachers, not inefficient young teachers.....
5. Believes in teacher becoming part of the community, not "trolley-car" nor "suitcase" type .....
6. Cooperates with difficulties, but not meddlesome with professional tasks.....
7. Encourages teacher's growth professionally, not opposed to teachers' meetings, summer-school attendance, etc.....
8. Believes in longer tenure for teachers, not "hiring and firing" every year.....
9. Enforces school attendance, not failing to cooperate with the attendance or truant officers .....
10. Decides school questions on their merits, not on personal reasons for self or members of his family.....

TOTAL SCORE .....

Work and Vote for the Candidate Receiving the Highest Score

CORRELATION OF CITY SUPERINTENDENTS' AUTHORITY WITH TRAINING, EXPERIENCE, TENURE, AND SIZE OF CITY

(Continued from Page 46)

The greater number of superintendents with no baccalaureate degree was found in city Group 1. Of the superintendents with the bachelor's degree only, more held superintendencies in city Group 2 than in any other city group. Of those superintendents with 1 to 15 semester hours' advanced study, more than 84 per cent were heads of school systems in cities of less than 4,000. Over two thirds of the superintendents with 30 or more semester hours' advanced study were heads of school systems in cities of 4,000 or more population.

The range of total years' experience, both teaching and administrative included, of the 200 superintendents was from 3 to 43 years (inclusive). The median of total experience was 14.1 years.

The proportion of city school superintendents in Kansas and Missouri who had more than 30 years' teaching experience was small. Few superintendents in Oklahoma and Nebraska had more than 20 years' total teaching experience.

Data of the investigation corroborated other testimony[3] to the effect that the superintendent is recruited mainly from the high-school principalship. Of the 200 superintendents reporting, 132 (66 per cent) had served as high-school principals, 67 (33.5 per cent) as elementary principals.

The range of tenure of positions held in 1925-26 by the 200 superintendents was from 1 to 24 years (inclusive). Median length of tenure in the four states of the investigation was 3.7 years.

In none of the four states was tenure secure. More than one fifth of the city school superintendents were serving their first year in the position held in 1925-26.

Tenure medians indicated somewhat of an increase as city populations were larger:

3.1 years was median tenure in city group 1;
3.56 years was median tenure in city group 2;
4.5 years was median tenure in city group 3;
3.75 years was median tenure in city group 4;
5.5 years was median tenure in city group 5.

Table I, immediately succeeding, shows the distribution of certain school administrative functions according to their exercise by (1) the city school superintendent, (2) the board of education, (3) both the superintendent and the board of education.

A few data were collected incidentally to determine whether or not the boards of education heard grievances and recommendations regarding school practices. The investigation found that the school boards were more likely to consider recommendations and grievances from principals than from teachers. In the case of

[3]Status of the Superintendent, First Yearbook of the Department of Superintendence, 1923, pp. 48-56.

neither principals nor teachers was the direct hearing of recommendations and grievances by the school board frequent.

TABLE I.—To Show the Exercise of Certain School Functions

Function	Superintendent	Board	Both
Who approves general plans for new buildings?	10	10	148
Who grants permission for the use of school buildings for public meetings?	102	57	39
Who recommends teachers for employment?	181	3	16
Who assigns teachers?	190	4	6
Who transfers teachers from one grade to another or from one building to another?	176	9	11
In case the board has a salary schedule, who presented the idea?	113	5	4
Who constructed the salary schedule?	64	2	59
Who determines the salary for each teacher?	69	70	59
Who appoints substitutes?	184	12	3
Who sets pay for substitutes?	95	65	17
Who prepares the budget?	59	18	118
Who recommends purchase of supplies and equipment?	147	1	50
Who appoints new janitors?	24	138	34
Who determines new janitors' salaries?	12	155	22
Who prescribes detailed duties of janitors?	153	20	20
Who removes inefficient and insubordinate janitors?	41	103	36
Who initiates the movement to place new subjects in the curriculum?	192	2	3
Who initiates the movement to discard subjects from the curriculum?	189	0	5
Who determines the observance of holidays?	72	78	50
Who determines the length of holiday recesses?	57	74	63
Who determines the school's policy regarding athletics?	157	11	26
Who introduces new policies for the school?	167	2	24
Does the board indorse the supt.'s recommendation regarding the discharge of teachers?	(Yes) 167	(No) 3	* 12
Has the board ever refused to indorse the supt.'s recommendation that a pupil be expelled?	(No) 184	(Yes) 3	0

*12 answers were qualified.

The data seemed to indicate that in half or more of the 200 school systems in Kansas, Missouri, Nebraska, and Oklahoma, boards of education considered grievances and recommendations regarding school practices directly from patrons of the school.

The functions listed in Table I, which the superintendent had authority to carry out, were correlated with total training, teaching experience, tenure, and size of city.

TABLE II. Correlation Between Training and Authority in the Four States, 200 Superintendents Replying

Number of Items on Which Supt. Has Authority	Superintendents' Training: No Degree	Bachelor's Degree	1-15 Hrs. Graduate Work	16-29 Hrs. Graduate Work	30 or More Hrs. Graduate Work with or Without Master's Degree	Total
23-24	..	.	..	..	1	1
21-22	..	1	2	2	3	8
19-20	1	1	3	2	8	15
17-18	..	2	7	3	11	23
15-16	2	1	12	12	18	45
13-14	2	7	11	9	12	41
11-12	1	3	15	10	9	38
9-10	2	4	5	4	5	20
7- 8	..	1	1	3	1	6
5- 6	..	1	..	..	1	2
3- 4	..	..	..	1	..	1
1- 2	..	..	..	..	..	0
Total	8	21	56	46	69	200

The r between the training of superintendents and amount of authority possessed was found to be .168. Such a relation can be interpreted thus: The chances are 1:6 that the superintendent's authority will increase as his training increases.

The r between years' total experience and amount of authority the superintendent possessed was .08. Such a degree of correlation was too slight to be significant.

TABLE V. Correlation Between Size of City and Amount of Authority in the Four States, 200 Superintendents Replying

Number of Items on Which Supt. Has Authority	Population of City: 1,000-1,999	2,000-3,999	4,000-6,999	7,000-9,999	10,000-15,000	Total
23-24	..	..	..	..	1	1
21-22	3	3	2	..	..	8
19-20	4	5	3	2	1	15
17-18	5	8	4	3	3	23
15-16	11	20	12	2	..	45
13-14	13	20	3	3	2	41
11-12	15	13	5	4	1	38
9-10	13	5	..	..	2	20
7- 8	3	1	2	..	..	6
5- 6	..	2	..	..	..	2
3- 4	1	..	..	..	..	1
1- 2	..	..	..	..	..	0
Total	68	77	31	14	10	200

The r between size of city in which the superintendent was employed and the extent of his authority was .194.

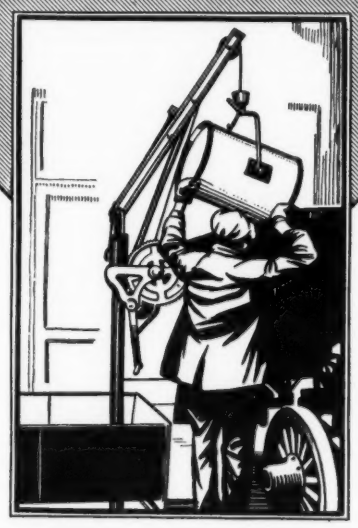
A correlation between size of city and amount of training was made to determine whether or

(Concluded on Page 160)

TABLE III. Correlation Between Authority and Total Experience of 200 Superintendents in the Four States.

No. of Items on Which Supt. Has Authority	Years of Total Experience of Superintendents: 1-5	6-10	11-15	16-20	21-25	26-30	31-35	36 & more	Total
23-24	..	..	..	..	1	..	..	..	1
21-22	1	2	3	2	..	..	..	..	8
19-20	..	3	4	4	1	2	1	..	15
17-18	1	5	6	7	2	2	..	..	23
15-16	..	14	11	7	4	4	4	1	45
13-14	3	11	10	12	1	3	1	..	41
11-12	5	8	12	7	3	1	2	..	38
9-10	..	3	6	4	2	3	1	1	20
7-8	1	2	2	..	1	..	..	..	6
5-6	..	..	1	..	..	1	..	..	2
3-4	..	..	..	..	1	..	..	..	1
1-2	..	..	..	..	..	..	..	..	0
Total	11	48	55	43	16	16	9	2	200

The G&G Telescopic Hoist with Automatic Gear Shifting Brake Device and Silencer



The 1500th school to use the G&G Telescopic Hoist is New Addition of Longfellow School, Kansas City, Missouri

This G&G Telescopic Hoist has been selected by Charles A. Smith, Archt., Kansas City, Missouri

THIS HOIST for the 1500th SCHOOL

Fifteen hundred G&G Telescopic Hoists now in use for ash removal in schools in 42 states and District of Columbia

THE desirability of G&G Telescopic hoist equipment for the removal of ashes from school buildings is best expressed in the fact that there are now 1500 schools throughout the country where G&G Hoists are in use.

While G&G ash removal equipment has long been popular in other types of structures such as banks, hospitals, theatres, hotels, larger residences, etc., its safety features have specially recommended it for use in connection with school buildings.

Gillis & Geoghegan have been pioneers in developing equipment so as to eliminate the danger of the open hoistway. This is accomplished by patented opening-closing-locking sidewalk doors with spring guard gates, providing a complete barrier around the sidewalk opening when ashes are being removed. When Hoist is not in use, the doors automatically close flush with pavement and lock.

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More than 40 schools in EACH of the following states are using G&G Hoists:

New York*
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Pennsylvania*
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Massachusetts
Iowa
Illinois
Connecticut
Minnesota
Kansas
Missouri

*More than 100 schools

From the standpoint of efficiency and economy in operation, there is really nothing to equal the G&G Hoist. It does its work quickly at a minimum cost of operation and maintenance. Its staunch construction assures a great many years of satisfactory service.

There is a G&G Telescopic Hoist to fit any specific ash removal problem in a school. Where the volume of ashes to be removed is not large, a manually operated Hoist may be used. Where there is a considerable volume of ashes, an electrically operated Hoist is always recommended. The cost of electric current to operate this Hoist is surprisingly small. One cent will pay for the raising and lowering of many cans.

Where ash trucks can drive up alongside of sidewalk opening, the overhead crane models are recommended as they do away with the rehandling of ash cans at grade level, the ashes being dumped direct from the Hoist into the truck or wagon.

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GILLIS & GEOGHEGAN

551 West Broadway New York

(Concluded from Page 158)

not the larger cities of the investigation employed superintendents with more training. The *r* was .206, a correlation which was not very great, but which showed a tendency for more highly-trained superintendents to secure positions in the larger cities of the investigation.

Since the above correlations exist, it is evident that, as conditions now prevail, factors other than amount of training, length of tenure, years' total teaching experience, and size of city in which the school system is located, exert considerable influence on the amount of authority allowed the superintendent of schools in the smaller cities of Kansas, Missouri, Nebraska, and Oklahoma.

TABLE IV. Correlation Between Authority and Tenure in the Four States, 200 Superintendents Replying.

No. of Items Supt. Has on Which Authority	Number of Years in Present Position								
	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15 & More	Total
23-24	1	..	..	..	..	..	..	..	1
21-22	3	2	..	..	2	..	1	..	8
19-20	3	5	4	2	1	..	..	..	15
17-18	9	8	2	1	..	1	..	2	23
15-16	15	14	6	6	2	..	..	2	45
13-14	18	12	5	5	..	..	..	1	41
11-12	19	13	2	2	..	1	..	1	38
9-10	7	5	3	3	..	1	..	1	20
7-8	4	..	..	1	..	.	1	..	6
5-6	1	..	..	..	..	..	1	..	2
3-4	..	..	1	..	..	..	..	..	1
1-2	..	..	..	..	..	..	..	..	0
Total	80	59	23	20	5	3	3	7	200

r = .043

PARK AND PLAYGROUND ACCIDENTS

(Continued from Page 56)

and prevention of accidents. This organization obtains most of its financial and moral support from the great insurance companies and industries. It is not simply a group of sentimentalists, but one devoted to economic saving as well as that of life. As a result of their efforts railroad, street-car and general industrial accidents have been greatly reduced but accidents outside these fields have been increasing alarmingly, particularly on streets and highways. This organization is earnestly advocating more parks and playgrounds purely as a safety measure. It has demonstrated that a properly equipped and directed playground is really a haven for the children instead of a place of liability as to accidents. They are encouraged and assisted in this belief by such officials as Chief Collins, of the Chicago police, who is urging more and more playgrounds.

Naturally, the great problem at this time is the automobile. In the past eleven years the actual number of railroad and street-car accidents have been reduced just one half, while the automobile crop has increased six-fold. It is quite true that the number of cars have increased in proportion, but the fact of the accidents remain.

Unfortunately it has been impossible to obtain positive and nation-wide data as to the value of playgrounds as life-savers, but from all accounts received there seems to be no doubt that areas contiguous to playgrounds are much safer than other areas not so favorably situated. But the playgrounds themselves must be made safer, and must serve as a training field for safety in the community outside, and in the home.

By sending out a large number of questionaries to park and recreation officials in the leading cities of the United States and Canada, a fair share of replies were received though many did not report. However, reports received give a total attendance of approximately 35,000,000 for 1924, from which we glean the following:

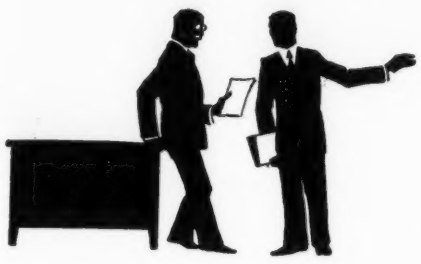
Accidents on Playgrounds

Fatalities	4
Total accidents on apparatus	202
In games	60
In pools and on beaches	26
Miscellaneous	36
Classified as to apparatus:	
Swings	44
Slides	41
Teeter Ladders	22
Horizontal Ladders	21
See Saw	15
Slanting Ladders	14
Lawn Swings	13
Horizontal Bars	5
Giant Stride	4
Ocean Wave	2
Parallel Bars	2
Merry-Go-Round	0
Miscellaneous	19

The four fatalities were in two cities; two each. Two were on the large lawn swing, almost unknown outside Chicago and suburbs. One was on a slide while the child was violating a rule as to its proper use, and the other in a pool.

Doubtless the rather large number of accidents occurring on swings and slides is due to the fact that practically every playground in the country has one or many of each of these devices, and that they are used by such hordes of children. Conversely, there are comparatively few of the large lawn swings and teeter ladders in use and these by very small numbers of children, hence the ratio of accidents is very high, and the writer would recommend that their use be abandoned. The horizontal ladder shows rather a high rate, but it seems to be in favor, and if reduced in height from seven and one-half to six feet, most of the danger would be eliminated; thus retaining a useful piece of equipment.

(Concluded on Page 162)



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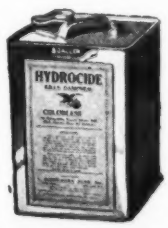

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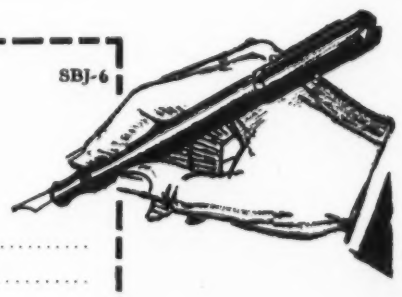

L. Sonneborn Sons, Inc.

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(Concluded from Page 160)

The "giant stride," "ocean wave," and "merry-go-round" with tremendous capacity and popularity, show a wonderful record. By the use of light-weight nonmetallic ladders on the giant stride, accidents may be practically nil. In fact the proper use of almost all standardized equipment will result in very few accidents.

The school authorities of Highland Park, Michigan, made an interesting survey to determine the attitude of the school patrons concerning the use of equipment. More than 2,500 replies were received. About 60 per cent advocated the retention of all equipment now in use. Then as to the use of different pieces of apparatus the vote reached as high as 92 per cent on some items. The comment of the patrons was most interesting and quite generally most favorable.

One city reports 200,000 attendance, using 324 pieces of apparatus with only two accidents reported. Detroit has a particularly interesting report, showing about 8,000,000 attendance with only 37 accidents; 13 of which were on apparatus, and no fatalities. During the same time 92 children were killed on the streets and 2,093 injured.

It may be interesting to know that the most dangerous age is from 3 to 9, as a group. Within this group the peak is at the age of 5 and there is a sharp falling off at 6; or the beginning of school life. The most dangerous age in pools and beaches is from 16 to 19. A most favorable record in life-saving by regular life guards is shown. One city operating 5 beaches reports 400,000 attendance with 72 rescues and no drownings during bathing hours when guards were on duty. In fact, most drownings occur during off hours; early morning or at night when beaches are unguarded and officially closed.

The legal phase of accident liability has been the source of some considerable worry to school and recreation officials. Summing up briefly a large number of laws and court decisions in many states, it may safely be said that the almost universal trend is toward holding the officials not liable except where actual unquestionable negligence can be shown, and then only when defective equipment or other dangerous conditions are shown to have been reported to the proper officials, and a reasonable time given for correcting the conditions. The Springfield, Illinois, recreation commission is experimenting with liability insurance. It remains to be seen how this will work out. As there is no legal liability except in case of negligence, this insurance feature might be interpreted as placing a premium on negligence. In some states the courts have held that the premiums on such insurance cannot legally be paid. In one of these decisions the court clearly stated that there is no liability on playgrounds for accidents except in case of negligence and that it is not only a proper function of the authorities to equip the grounds but in fact a duty.

It appears that the proper way to reduce accidents to the minimum both on the grounds and in the communities outside, is by an intelligent and persistent effort along the following lines:

1. *Inspection.* All equipment should be inspected daily and reports made. In case of defect in apparatus or any unsafe condition on the ground the apparatus or obstruction in question should be removed at once or made unusable until repairs can be made. This should include such as glass, stones, rubbish, or other debris offering any hazard. Since a great many accidents occur in baseball games, all bats should be taped and inspected daily.

2. *Instruction.* The right use of each piece of apparatus may be taught by means of signs, or posters and by the instructors or attendant in charge. There is a right and wrong way to use them all as is true of any other device of daily use. Even with care there will still be some accidents, but their reduction will certainly be quite noticeable.

In conclusion, owing to modern conditions, particularly on the streets and highways, due to the rapid growth of the use of the automobile, park and playground spaces should be treated as a real necessity from the standpoint of safety to children. This is acknowledged by safety bodies, police authorities and others interested in the child's welfare.

Grounds should be equipped, but with apparatus showing least hazard in proportion to use. Inspection should be constant and vigilant at all times and repairs should be made promptly and thoroughly. Then sufficient instruction should be given to assist in making possible a reduction in the appalling number of accidents outside the grounds, especially on the streets and highways.

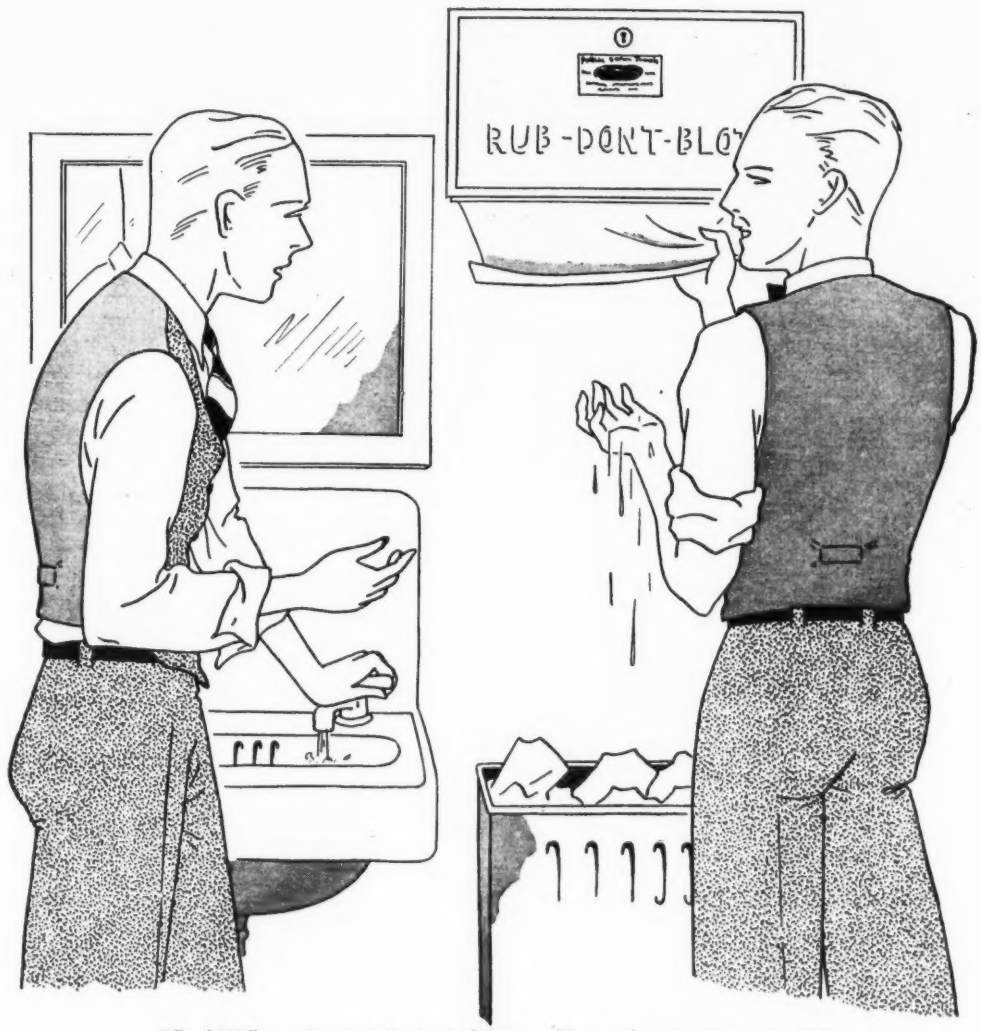
Officials in charge can always feel that any effort or expense incurred in saving the life of even one child will amply be justified, especially if that child be yours or mine.

BRIDGING THE COMMENCEMENT GAP

(Concluded from Page 48)

It offers the pupil and teacher an opportunity to contemplate their records for the year and to realize the value of the school in their lives. It sends the visitor home throbbing with the life of the school and enthusiastic because of what he has seen and heard.

—Dr. Jacob A. Shawan, formerly superintendent of schools of Columbus, Ohio, died suddenly at his home in DeGraff, Logan county, on May 4. He was 77 years old. Dr. Shawan was superintendent from 1889 to 1916.



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BOOK REVIEWS

The New Everyday Arithmetic

By Franklin S. Hoyt and Harriet E. Peet. First Book. Cloth, 338 pages. Price 76 cents. Third Book. Cloth, 420 pages. Price, 92 cents. Published by Houghton Mifflin Co., Boston, Mass.

The first book of this series approaches the subject of arithmetic from the children's actual needs in the facility of numbers. The counting which the children in the third and fourth grades must engage in while at work and at play forms the introductory to the study of arithmetic. The authors, too, base their lessons upon a scientific study of the nature of problems best suited for that class of children and the processes to be employed in securing speed and accuracy in arithmetic study.

Thus, while the lessons are built upon a progressive plan from the simpler to the more complex problems, they deal with commodities and situations most likely to concern the pupil. There are toys to be counted, bought, and sold, game scores to be recorded, clocks to be read, travel expenses to be figured, etc., etc. Addition, subtraction, multiplication, and division are demonstrated in lessons throughout.

The third book goes into fractions and deals with decimals and percentage, and the more involved transactions in commodity and money matters. General methods of business, insurance and banking, borrowing and loaning, ratio and proportion, are explained. The student is initiated into the subjects of measurements, common business forms, problems in building, account keeping, collections, etc., etc. The metric system is explained.

The lessons also seek to familiarize the student with the principles of business that apply to farming, commerce, and finance. Instructive problems are presented. The book is also provided with a list of definitions of terms employed in the business world.

Economic and Social History of the United States

By Isaac Lippincott and H. R. Tucker. Cloth, 635 pages. Published by D. Appleton & Co., New York City.

The country's real story is unquestionably founded in the peaceful pursuits along economic, political, and social lines—pursuits that enabled its people through the development of the natural resources to give expression to the nobler impulses and aspirations of life.

The authors tell that story with a remarkable completeness, recognizing the thought that economic stability is essential to the political and social growth of any country. They begin, and properly so, by giving the European background, and the old world influences that entered into new world beginnings. These influences asserted themselves in the colonial industries, in the earlier production methods, and in the manner of distribution.

The history of the industrial and commercial development of a country, which now leads the world in enterprise and constructive ability, is a vital factor in giving impetus to civic and cultural progress that must run simultaneously with the economic. The student cannot know the history of his country unless he knows something of the forces that made that history possible.

The splendid struggle in turning the natural resources of the country to the service of man must be duly appreciated, and the economic stability of a nation as a prerequisite to political and social advancement must be understood, before the student can comprehend the causes that led to the building of a great country.

The authors tell of the beginnings and subsequent development of agriculture, of manufacture, of commerce and trade, and of the political life of an earlier day which finally expanded and crystallized itself into a staple form of government. They tell of the great departures and strokes of enterprise, the things that were decisive and epochal, and that led to economic power, political security, and social progress. Every essential phase of that growth and development which gave prestige, prosperity, and power to the nation is adequately dealt with.

Toys Every Child Can Make

By Harry B. Wright. Cloth bound, 64 pages. Published by The Bruce Publishing Company, Milwaukee, Wisconsin.

Toys have their value as an aid to the development of the child mind. They excite the imagination, stimulate the play spirit, and give life and action to inanimate things. The making of toys tends to facilitate manual skill and to excite pride in production.

The author recognizes a fascinating art in toy-making. He takes the boys and girls under his wing and shows them how to make toys—toys that they really can and do make. He instructs them in the wood to be used, the tools to be employed, and how to use paints. The various operations in producing a toy are explained. There are elephants, tigers, trains, airplanes, automobiles, and circuses, and what not, to make.

The table of contents notes a long list of toys, which are simple in design, easily constructed, and which are certain to engage the fancy and interest of the child. The illustrations are done in black and white, printed on large pages of substantial paper.

My Story Book

Picture-Story Reading Lessons, Series II. By Nila B. Smith and S. A. Courtis. Cloth, 154 pages, illustrated. Price, 68 cents. World Book Co., Yonkers, N. Y.

This book is intended for use in the last half of the first grade and is designed for pupils who have completed the first series. The material has many interesting features and contains several devices entirely new and original in reading instruction.

There are several distinguishing features in the book. Most important of these are the new and successful word-getting process by which children can be taught naturally to attack new words. Another feature is the provision for individual progress in accordance with the pupil's ability.

The material has been planned to develop in children initiative, personality, and intellectual power. Color drawing and dramatization are utilized to the best advantage in stimulating and arousing interest in the mastery of the reading lessons. Among the selections comprising the lessons are The Old Woman Who Lived in a Shoe, Little Jack Horner, The Three Little Pigs, Boy Blue, The Hare and the Tortoise, The Fox and the Grapes, and The Gingerbread Boy.

A Basic Writing Vocabulary

By Ernest Horn. Published by the College of Education of the University of Iowa, Iowa City.

This manual has been prepared for the purpose of discussing the most important problems and technics involved in this type of vocabulary research. It makes available a list of 10,000 words most often used in writing in the schools, and it

shows how the list of words may be used not only for practical but also for scientific purposes.

The monograph has been issued with the aim of presenting information which is of interest and practical value to the great body of teachers and supervisors and it gives a summary and a critical evaluation of the various investigations which have been utilized in determining the list of 10,000 words.

Word Cards

Picture-Story Reading Lessons, Series II. By Nila B. Smith and S. A. Courtis. Price, per set, $1.68. World Book Co., Yonkers, N. Y.

The material is in the form of printed cards and includes 25 word cards and 24 word builders. The material offers drill on key words and word builders for the use of pupils in picture-story reading lessons in the first grade. The method used is that of generalizing consonants and combining these with dictionary helps, practice exercises in seat work, and work for developing slow pupils. The key word T is used in building up words and in practice in using word builders. The children are expected to learn the list of key words, and considerable practice in seat work is afforded as a means of learning new words to be added to the list already in use.

Toy Town

By Etta A. Blaisdell. Cloth, 130 pages, illustrated. Price, 65 cents. Little, Brown & Co., Boston, Mass.

This book tells all about toy town and is a book that no boy or girl who is just beginning to read will fail to enjoy. It may also be used as a beginner's text in silent reading or for reading at home.

Dictionary

Picture-Story Reading Lessons, Series II. By Nila B. Smith and S. A. Courtis. Paper, 96 pages. Price, 48 cents. World Book Co., Yonkers, N. Y.

This dictionary has been designed to accompany the authors' Picture-Story Reading-Lesson Series, and provides the necessary self-help assistance for acquiring the vocabulary of the reading-lesson series. The different methods used in attacking new words as introduced in the lessons are described.

Directions are given in the teacher's manual for developing the power to attack new words, as well as for achieving the goals of placing children upon their own responsibility and permitting them to progress at their individual rate.

Practice Exercises in Reading

Book 4. Prepared by Adele M. Mosseman, Los Angeles, Calif. Paper, twenty pages. Published by the Research Service Company, Los Angeles, Calif.

The book provides a series of fifty exercises in reading, for improving comprehension, and is suited to class use for fourth, fifth, and sixth-grade pupils. The exercises are based on the text "Journeys to Distant Lands," by Barrows and Parker, and were devised originally for use in adjustment rooms of the Los Angeles schools. The materials have been so arranged that they are suited to general classroom use as a group activity, and afford a ready means of training children in thoughtful habits of reading. Ample means are provided for testing and recording growth.

Changing Practice in Handwriting Instruction

By Paul V. West. Cloth, octavo, 142 pages. The Public School Publishing Company, Bloomington, Ill.

This book is a surprisingly comprehensive study of handwriting instruction in American cities. The author has used as a basis of it the replies to a questionary participated in by 439 individuals, representing city and rural school districts.

While we have had numerous studies of handwriting, none in recent years has given so accurate a picture of the general situation and none has so clearly pointed out the variations in the organization and progress of teaching writing, the lack of preparation, and inequality in teaching and supervising the subject. This, however, is not the valuable element of the book. The most useful chapters, or rather sections, of the work are the carefully formulated suggestions and principles for improving the situation. The author has a clear grasp on the fundamental theory of the subject and verifies his recommendations by carefully reasoned references to dependable theory and long experience.

The final chapter suggests a series of 80 experiments which may well be undertaken to determine the correct answers to problems in the administration, supervision, and general method of instruction.

The Correlated Art Textbooks

A series of educational art texts for advanced schools. Books I, II, and III. By Pedro J. Lemos and Bess Eleanor Foster. Published by the Abbott Educational Company, Chicago, Ill.

The texts are a result of an effort to place art in step with the newer developments in the subject. They provide a course in art correlated with other phases of life, which are intended to satisfy the educational needs of pupils in the higher grades and the senior high school. They teach the economic and cultural uses of art in life, and thus furnish an excellent foundation for those intending to make art a profession.

In the arrangement of the material, special care has been taken to present the subjects correlatively as they are used in life. The grouping of educational levels has been revised to form a special group for the ages at which students are most inclined to leave school. Each book contains six full pages in color. In each there are two pages of color theory, four pages of design, four pages of lettering and printing, and a page of masterpieces for appreciation.

The books represent a well-balanced course covering the field above the sixth grade, based on major objectives of education and a command of the fundamental processes. Mechanically, the volumes are superb.

Magic Casements

Compiled by Geo. S. Carhart and Paul A. McGhee. Leather—cloth, octavo, 727 pages. The Macmillan Co., New York City.

Old classics, new classics, and many poems of little known and rarely read authors have been gathered by two teachers for the use of high-school students. On the whole, the choice is excellent and reflects a love of good literature and a keen understanding of the types of poetry which are most likely to appeal to boys and girls in their teens. Certainly the book, in the hands of a competent teacher, will be "charmed magic casements, opening on the foam of perilous seas, in fairylands forlorn." A few of the selections appeal to us as "perilous seas" of thought which we can hardly approve for indiscriminate reading by boys and girls.

The Path of Learning

By Henry W. Holmes and Burton P. Fowler. Cloth, 488 pages. Published by Little, Brown & Co., Boston.

A collection of essays from current periodicals by presentday leaders and favorites—not unmixed with current foibles and fallacies as well as eternal verities.

The New Jersey Teachers' Pension and Annuity Law

By Ida E. Housman. Cloth, 144 pages. Price $1. Published by Ida E. Housman, Hoboken, N. J.

The book is a digest and explanation of the New Jersey law for the pensioning of teachers. The author explains the operation of the law and the methods of calculating benefits as illustrated by

(Continued on Page 168)

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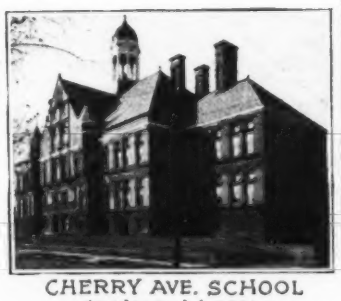

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(Continued from Page 166)

actual cases. Among the topics covered in the text are disability retirement, death and optional benefits, superannuation retirement, and the collection and administration of retirement funds.

We need similar practical works on definite plans for pensions, salaries, etc., written by experienced people who are not limited in method and outlook as are thesis writers and college instructors. The greatest value of the present book lies in the fact that it represents a well-defined idea of a pension system which is correct in principle and successful in operation.

Metal Work

By Hugh M. Adam and James H. Evans. Cloth, 277 pages. Price, $2.50. Longmans, Green & Co., New York, N. Y.

The book is the second edition of a work which has been popular in British schools and which has now been revised and improved to bring it up to the present standards and school needs. In the author's opinion, metal work may well be offered as a handicraft (industrial-arts subject) in connection with woodwork, either in a single room with accommodations for 20, or in two separate rooms adjoining each other.

The book is divided into two sections: In the first section the authors discuss properties and manufacture of metals and alloys. In the second section are discussed the common processes of working metals—forging, drilling, casting, lathe work, etc. One chapter is devoted entirely to the subject of sheet-metal work, soldering, and brazing. Other useful chapters take up metal finishing with lacquer, etc., electroplating and etching.

Third-Grade Arithmetic Practice

Paper, 104 pages, 48 cents. The Macmillan Co., New York, N. Y.

Eighty lessons are here provided for finding and correcting pupils' weaknesses in the fundamental processes. The material is based on McMurry and Benson's Social Arithmetic.

Essentials of School Law

By Harry Raymond Trusler, Dean, College of Law, University of Florida. Cloth, 478 pages. Published by The Bruce Publishing Company, Milwaukee, Wis.

Those familiar with the accumulated law reports of the United States will also know that the courts have in the past been and are still concerned with much litigation affecting school interests. This is in part due to the lack of clarity in school laws, to the constant expansion of school administrative effort, and to some extent to the lack of caution and preparation in entering upon given departures.

The modern school executive, therefore, must not only be informed on the various duties and responsibilities which affect his office, but he must know something of the legal limitations as well as the legal rights which come within the province of school administration. In engaging upon any enterprise, innovation, or departure in the school field, it becomes of vital importance to be informed as to what the court decisions affecting them have been. Again, situations may spring up which demand an immediate solution if vexatious litigation is to be avoided. A knowledge of the law here is imperative if trouble is to be avoided.

The author, who is a lawyer as well as a schoolman, approaches the subject of school law in a comprehensive manner, and realizing the exigencies that will arise knows just when and where legal guidance is needed. He explains exhaustively the authority and responsibility of teachers and touches upon hundreds of topics such as commencement exercises, the use of cosmetics by pupils and teachers, the use of tobacco, loud talking, punishment for absence or tardiness, etc., etc.

In recent years the question of high-school fraternities has concerned the school authorities in an aggravating manner. Bible reading in the public schools, too, has come into serious consideration. School officers have not always been clear as to their rights in the premises. Much annoying and expensive litigation over these two questions alone has been the result.

The rules and regulations employed by school authorities cover a wide range of contacts, which the schools have to outside interests, involving many legal considerations. The rules seeking to control pupils after the regular school hours and their movements between the school and the home, the right to enforce discipline, the suspension and expulsion of pupils, and under what conditions the teacher may be sued in a court of law, have frequently been contested.

The author follows a discussion of the matter of rules and regulations by a chapter on the rights, privileges and responsibilities of the student. All questions affecting the right to attend the public schools, segregation of races, compulsory school attendance, detention of truants, the tuition question, transportation and the liability of pupils for injuries to others are dealt with.

Among the more important chapters in the book are those dealing with the reasonableness of rules and regulations engaged in by boards of education, superintendents, principals, and teachers. The courts have established with considerable definiteness the question of authority. They deal with a long list of rules which cover not only the matter of studies, but also with situations that have led to complications and have raised the issue as to just how far the authority of the school board goes. The health problem, too, has led to confusion as to extent of authority. The author has recognized the importance, too, of clarity on teachers' contracts and the many misunderstandings which arise here.

The financial transactions of a school system entail an endless list of legal considerations. These, of course, involve loans, bonds, taxation, contractual capacity, and liability of the public schools, school-building projects, the purchase of land, and the like. Much annoying litigation and awkward delays may be avoided if the school officers are certain as to the legal route here to be traveled. The author also deals with the status and regulation of private schools.

In his analysis of the essentials of school law, the author confirms his findings and conclusions on any particular case by citing the decisions bearing upon the same. Several thousand such decisions, covering every situation likely to arise, are presented in the book. The book not only supplies a complete table of contents, but an exhaustive index which will enable a school official to readily find the information bearing on any case he may desire.

The Golden Fleece

Padraic Colum. Cloth, 289 pages. The Macmillan Co., New York.

A school edition of the Irish poet's charming account of the Greek heroes. The illustrations are melancholy and extreme enough to make them, in part at least, unsuited for children.

The modern author of school readers does not underestimate the value of the story form of book building. He knows that he can command the interest of the child by telling him a story, and through that story transmit the more serious lesson.

This volume begins to enlist the interest of the little boys and girls by confiding to them the fact

(Concluded on Page 171)

(Concluded from Page 168)

that the book is copyrighted, and to tell them what part the authors play in the making of this schoolbook. The series of charming stories that follow are neatly illustrated.

Home Folks

By J. Russell Smith. Cloth, 252 pages, illustrated. Published by The John C. Winston Company, Philadelphia.

To give a geography the name of "Home Folks" will seem a little queer, but the author, in narrative form, tells of the many homes which he visits. All life radiates from the home. His heroes rush to a railway station, jump on a train, and travel into the country. Farm life and village life is unfolded in word and picture. The hatching of chickens, milking of cows, cutting of hay, picking of berries, etc., etc., are engaged in. How things are grown is graphically told.

Nor do the student heroes remain in the country. They visit the large cities, ascertain what the manufacturing, commercial, and social pursuits are. They see street traffic and skyscrapers, factories and mills, rivers and harbors, rail and steamship transportation. They learn how the people work and play, live and breathe, and how the great world moves and thrives.

On the whole, the book is a somewhat unique yet a most practical approach to the study of geography. The book is liberally illustrated.

Junior High-School Mathematics

By Harry C. Barber, assisted by Helen M. Connelly and Elsie V. Karlson. Cloth, 267 pages. Published by Houghton Mifflin Co., Boston.

It is a long cry from the arithmetic taught for many years in the eighth grade and the type of work offered in the present book, the most important feature of which is its contact with the life of the child, its gradual introduction of algebra and geometry, and its emphasis on accurate thinking and problem solving. The subject matter of the book takes up computations applied to business, measurements, community problems, and the introductory principles of algebra and geometry. Ample drill is provided in fundamental processes and in the application of practical methods of computation to common problems in business, commerce, etc. The student is led to find his own errors by clever methods of checking and to discover his own weaknesses and in that way develop his powers. The book represents an excellent combination of arithmetical instruction, both for everyday use in life and for strengthening powers of accurate thinking.

Modern Plane Geometry

By John R. Clark and Arthur S. Otis. Cloth, 310 pages. Price, $1.35. Published by World Book Co., Yonkers-on-Hudson, N. Y.

This book is predicated on the principle that demonstrative geometry should be taught primarily to enable students to analyze problems and reason logically from a given situation to a conclusion. Mathematical principles are simplified and stated as nearly as possible in informal but accurate language. The topics included are those recommended by national committees on mathematics instruction. Ample exercises involving practical applications of principles to mechanics are provided. A valuable chapter of the book is devoted to instructional tests with time limits and standard norms. Provisions are made in the exercises, etc., to meet both the needs of slow as well as gifted students.

Research Studies in Commercial Education

By E. G. Blackstone. Paper, 160 pages. Price, 50 cents. Published by the College of Education and the College of Commerce, University of Iowa, Iowa City, Iowa.

The results of fifteen investigations intended to provide a factual basis for determining the content of commercial courses, the methods of instruction, and the testing of instructional results.

Geography—Europe and Asia

By Harlan H. Barrows, Edith Putnam Parker, and Margaret Terrell Parker. Cloth, 280 pages, illustrated. Silver, Burdett & Company, New York City.

The appearance of a new geography, well bound, printed, and illustrated, is a source of delight. It is another trip around the globe, a visit to far-off lands, strange peoples, with odd customs and surroundings. There are illustrations that are new, sights and scenes not witnessed before, facts and figures not heretofore encountered.

But, can a geography really be new? Does the world change so rapidly that this year's geography can be much different than the one of a decade ago? Well, progress and the shifts of time affect geography and the making of geography books. While the present volume notes the changes in the map of Europe, caused by the world war, the authors have found a new approach to the presentation of geography studies. They have proceeded upon the thought that the pupil should know why people work and play and live in different lands as they do. There are conditions of climate and soil, of tradition and environment, of government and education, that shape the struggle for existence and the recreational pursuits.

This volume, which is book three of a series of four books, deals with Europe and Asia. The text is a departure from other geographies in that it deals in imaginary travel journeys. It takes the reader to the British Isles, for instance, disembarks him at Liverpool, tells him that this is the gateway of England, and then proceeds to take him over the British Isles. The student is told about the important things and then is asked some pertinent questions.

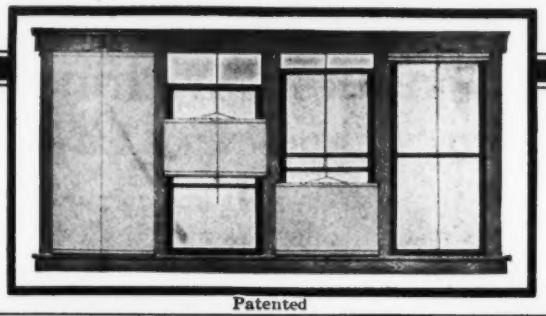
The illustrations of European cities are quite new in that they are taken from aeroplanes and thus provide a birdseye view of the principal buildings and general layout. The student secures a comprehensive idea of what London and Paris look like from the air.

The text familiarizes the reader not only with the physical peculiarities of the countries visited, but describes their activities with fascinating accuracy and completeness. The travel sketches cover the British Isles, France, Germany, Scandinavia, Austria, Hungary, Checko-Slovakia, Jugo-Slavia, Spain, Portugal, and Italy.

Japan, China, India, and Southeastern Asia, as well as Russia, come in for similar treatment. The text brings a thousand-and-one interesting things to the surface and elucidates these through hundreds of illustrations and a series of maps and charts.

The authors propose (a) to teach the pupil to think geographically, (b) to emphasize the application of geography to the problem of life, (c) to show how men live, what they do, and so far as feasible, why they live and work as they do in varied environments in different parts of the world, and (d) to provide a background which will aid the pupil later in fitting his own life intelligently into the physical surroundings or in choosing surroundings to which his capacities are suited.

In measuring the present volume in the light of these concepts, it must be admitted that the authors have succeeded remarkably well. They have broken ground along new lines of presentation. They have written a new geography.



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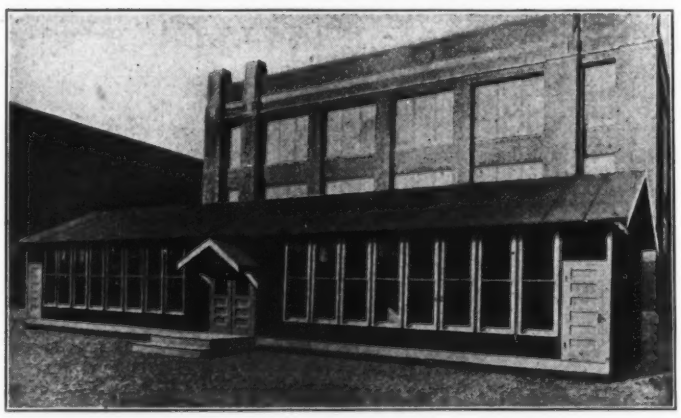

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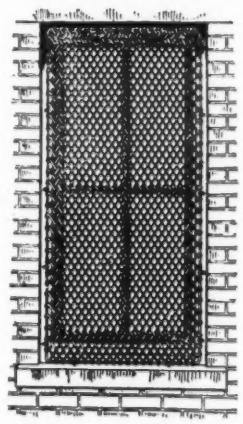

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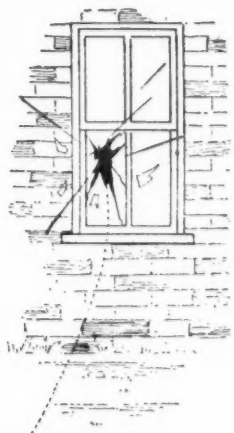

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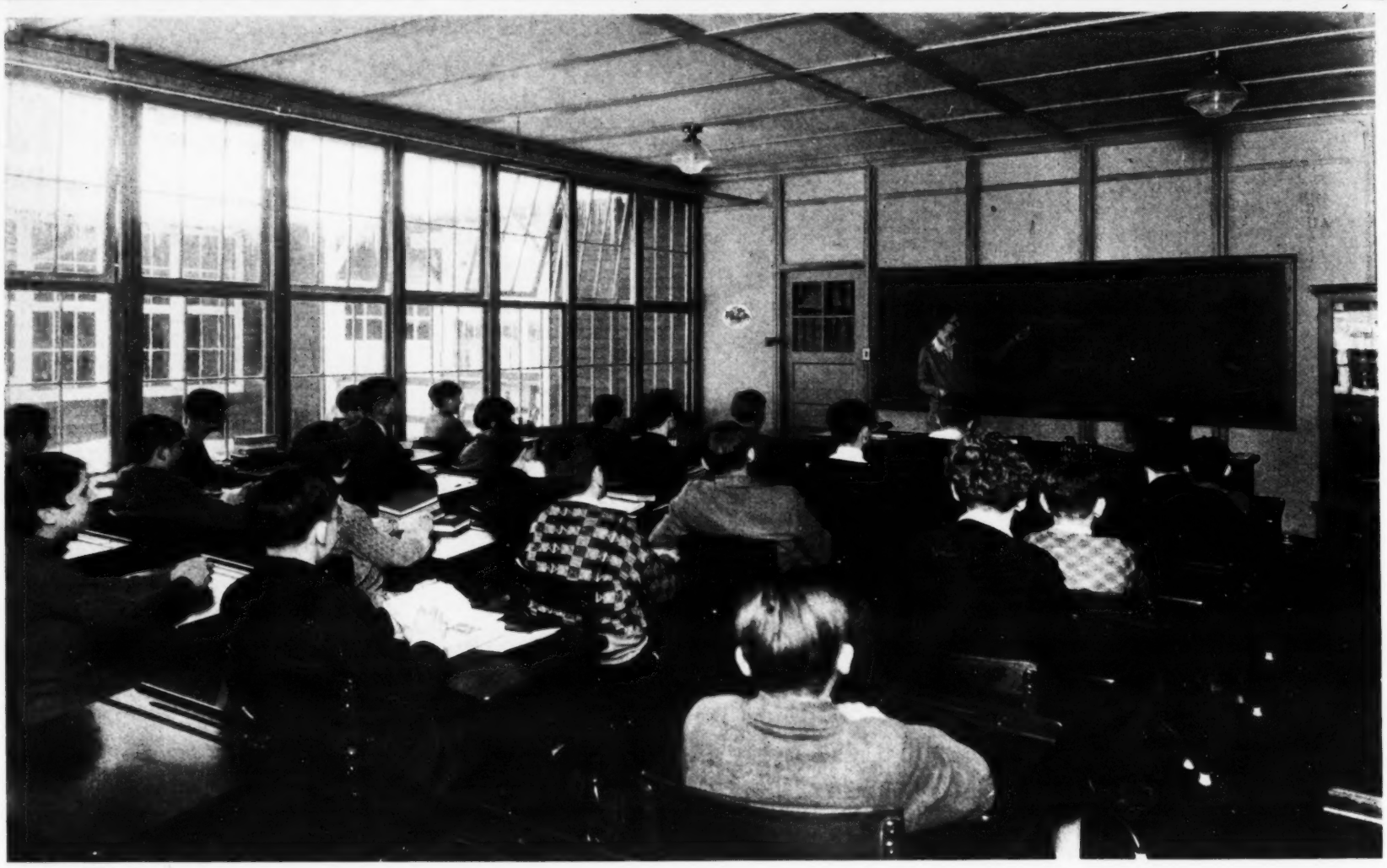
(Continued on Page 189)



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Detroit Steel Products Company
Lupton's Sons Co., David
SASH, VENTILATING
Detroit Steel Products Company
SCALES
Continental Scale Works
SCIENTIFIC APPARATUS
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Rowles Co., E. W. A.
SCIENTIFIC APPARATUS—Electr.
Standard Electric Time Company
SCREENS—PICTURE
Trans-Lux Daylight Picture Screen Corp.
SCRUBBING EQUIPMENT
Continental Chemical Corporation
Finnell System, The
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Clow & Sons, James B.
Hoffmann & Billings Mfg. Co.
SIGNAL SYSTEMS
Hansen Manufacturing Company
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Lupton's Sons Co., David
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DeVilbiss Mfg. Co., The
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Weber Costello Company
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Kansas City Scenic Co.
Lee Lash Studios
Novelty Scenic Studios
Tiffin Scenic Studios
Twin City Scenic Company
Universal Scenic Studios, Inc.
Volland Scenic Studios, Inc.
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Stedman Products Co.
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Blair Company, J. C.
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Detroit Steel Products Company
Lupton's Sons Co., David
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Durabilt Steel Locker Co.
Durand Steel Locker Company
Medart Mfg. Co., Fred
STEEL WINDOWS
Detroit Steel Products Company
Lupton's Sons Co., David
STONEWARE SPECIALTIES
Zanesville Stoneware Co., The
TABLES
Derby & Company, Inc., P.
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Rinehimer Bros. Mfg. Co.
TABLETS
Blair Company, J. C.
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Victor Talking Machine Co.
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Natl. Assn. of Teacher Agencies
Teacher Agencies Directory
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Vitrolite Company
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Brown Company
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Super Service Co., The
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Nash Engineering Company
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Clow & Sons, James B.
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American Foundry & Furnace Co.
Buckeye Blower Company
Buffalo Forge Company
Dunham Company, C. A.
Milwaukee Corrugating Co.
Nelson Corp., The Herman
Peerless Unit Vent. Co., Inc.
Sturtevant Company, B. F.
Young Pump Company
VARNISHES
Sterling Products Co., The
VENTILATORS
Buffalo Forge Company
Globe Ventilator Company
Lupton's Sons Co., David
Buffalo Forge Company
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Columbia School Supply Co.
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Wallace & Co., J. D.
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Stedman Products Co.
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Clow & Sons, Jas. B. (R. U. V.)
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WINDOWS—ADJUSTABLE
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Detroit Steel Products Company
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Austral Window Company
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Williams Pivot Sash Company
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WINDOWS—REVERSIBLE
Austral Window Company
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Athey Company
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Draper Shade Co., Luther O.
Du Pont de Nemours & Co., E. I.
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WINDOW SHADE ROLLERS
Columbia Mills, Inc.
Hartshorn Company, Stewart
WINDOWS, STEEL
Detroit Steel Products Company
WIRE GUARDS
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Cyclone Fence Co.
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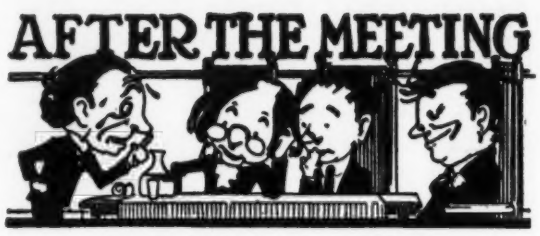
Stewart Iron Works Co., The
WOODWORKING MACHINERY
Wallace & Co., J. D.

ADVERTISERS' REFERENCE INDEX



THE IMPROMPTU SPEECH

The superintendent of schools of Spartanburg, South Carolina, Dr. Frank Evans, quite frequently uses the following anecdote when he is unexpectedly called upon for a speech. He has the joke so well memorized that he can let himself think about the speech without giving the joke a single thought during the telling; and when the audience breaks out in laughter, he knows that his salutatory is finished, and he can begin with the speech.

"Brederen and sisters, my subject natchelly divides hitself into two parts. De things which am in de tex', and de things which am not in de tex'. We'll rassle wid de las' part fus."

THE REPLY LITERARY

The superintendent of the Galesburg, Illinois, schools, Mr. Chester Miller, sends in his favorite joke, for which he claims no originality, but which he finds useful in interesting parents:

The master of an elementary school in England sent a circular to the parents of some of the pupils under his charge, stating that judicious corporal punishment often had a beneficial effect on backward boys, and asking if they would approve of such a course when he considered it necessary. The following is one of the replies he got:

"Dear sir i hav reseved ur flogeing sirkler and u hav My sankshen too wolup My sun Jhon ass much ass u like i no Jhon is a vary bad skolar his spaleng is simpely atroshes i hav trid to tech him Mysilf but he will not learn nothing so i hop u will bet it intow him as much assu kan. Urs truley.

"P. S.—the resin Jhon is sich a bad skoler is bekas he is My sun by My wifs first husband."

SKILLFUL QUESTIONING?

Mr. Henry H. Turner of Turner and Thebaud, Architects, Michigan Trust Bldg., Grand Rapids, Michigan, offers a joke possibly out of the realm of schoolhouse architecture, but in the realm of the classroom. It points out a bit of bad pedagogy, for he permits the teacher to do the reciting and the pupil to do the guessing. Although he disclaims any originality, we think from what we know of Mr. Turner, that he could produce such a joke without any recourse to friends and other magazines.

"Who fiddled while Rome burned?" asked the school teacher.

"Hector."

"No."

"Towser."

"Towser! What do you mean? It was Nero."

"Well, I knew it was somebody with a dog's name."

THE MOTE AND THE BEAM

Mr. E. G. Bentley, of the American Seating Company, offers a short story that can easily be used to get a man to open his mind about taking offense. He claims no originality for the joke, but cites it as an excellent example of an effective joke illustrating a point or a policy. This story adroitly illustrates differences in viewpoints and serves to break down the barrier of misunderstanding.

Two old friends met in a city far from their respective homes, and the jollification which followed resulted in their return to the hotel much the worse for their revel. One of them insisted his friend needed a doctor, and had the clerk call one while he put him to bed.

The doctor arrived and quickly sensed the trouble. "See any pink elephants?" he inquired.

"No," said the patient.

"Any sea serpents or blue dogs?"

"No, nothing like that either."

"Well," said the doctor, "you sleep a few hours and you will be all right."

But the friend was not satisfied. "Look here, doc," he said, "you are all wrong; my fren's in a bad fix; he said he couldn't see any sea serpents and blue dogs and this room is full of 'em."

THINKING YOUTH

Mr. G. O. Banting, superintendent of schools at Waukesha, Wisconsin, contributes two school jokes that inform us that the youth of our land are doing original thinking. They may not always arrive at the right conclusions, but nevertheless their originality is refreshing.

We had been talking about fire prevention in the kindergarten and spoke of the work of the fire department. It was suggested that we make pictures of a burning house and of the department coming to put out the fire. In making his picture of the house, Buddy covered nearly all of his paper. I questioned him about where he was going to make the pictures of the fire-truck, etc., and he replied: "This house is out in the country and they have no fire department out there to come."

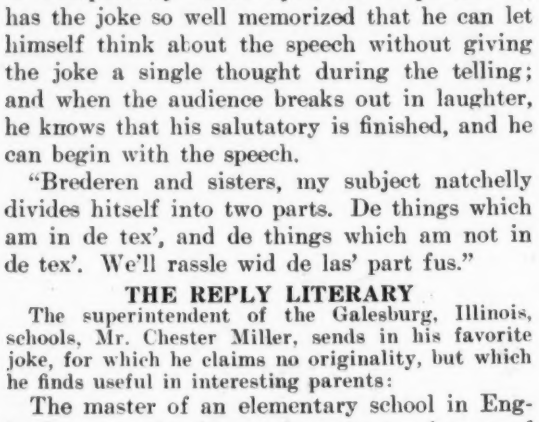
One day, when the children were choosing the songs they wished to sing, Vera said she wished to sing "about my papa's dying." I was rather mystified for a while, but asked her if she wanted to sing America, for I remembered the line, "Land where my fathers died."

Good Suggestion

Professor (giving elocution lesson to pupil whose vanity far exceeds his ability): "Now, when you have finished, bow gracefully and leave the platform on tiptoe."

Pupil: "Why tiptoe?"

"So that you won't wake the audience."



Schoolmaster (delivering final admonition to departing pupil): "Lastly, my boy, remember that you'l never succeed in business if you keep your eye on the clock."
Pupil: "That's going to be difficult, sir. I'm apprenticed to a watchmaker."

NEW FACTORY OF THE FINNELL SYSTEM, INC., ELKHART, IND.

Finnell System Moves. The Finnell System, Inc., which during the past 21 years has pioneered in the development of electric floor-scrubbing and polishing machines, has removed its factory and offices from Hannibal, Missouri, to Elkhart, Indiana. The firm has been extremely successful in manufacturing machinery especially adapted to use in large halls, school buildings, hospitals, and public institutions where large floor areas must be scrubbed in a minimum period of time and at a minimum cost. During the past five years, the business of the firm has grown with such rapidity that its old quarters at Hannibal have been entirely outgrown. The new plant at Elkhart is close to the population and shipping center of the country and will make it possible not only to greatly increase the output of the firm, but also will make improved servicing of the Finnell machinery possible.

BUYERS NEWS

Name Contest for Blackboard. The K-M Supply Co., of Kansas City, Missouri, has announced a prize contest to obtain a new and more appropriate name for the Trascher teacher's swinging blackboard. The blackboard contains 84 square feet of surface, has eight sides, and is arranged so that it is convenient for the teacher to handle and display to the class. The blackboard stands 40 inches from the floor and is at a convenient height for all pupils to see what is written. When the boards are swung around, they clear the teacher's desk and chair with plenty of room to spare. The blackboard is provided with solid bronze hinges and corner caps, and steel binding bronze-plated, and is also furnished mounted on steel pipe with fittings.

The Trascher blackboard has found wide favor because of its adaptability to classroom use in the grades as well as the high school. The teacher may write material for various subjects, examination questions, etc., before the class opens and keep them in sight or out of sight whenever she desires.

The firm offers a prize of $100 for the best name; $50 for the second best, and $25 for the third best name. All answers must be in by August, 1927.

Trade Publications

High-School Records. Under the title of "High-School Administration," the Rand Kardex Service Corporation of Tonawanda, New York, has brought out a book which offers a detailed, yet concise, discussion of the best methods which have been developed in office procedure for high schools. The book is based on a study of the various phases of high-school administration, which involves the keeping of records for the several departments of the school. A scientific study has been made of the different types of records required in small, medium-size, and large high schools, and from these, forms have been developed for use in connection with the Rand Kardex system of filing.

The book is the work of an experienced schoolman who thoroughly appreciates the difficulties and the need of records and who has worked out economical, as well as complete, plans for these records. In the book, the administrative problems have been organized in six divisions, with one section of the book devoted to each division. The methods described have been carefully worked out and the forms shown are in regular use in many high schools throughout the country.

Catalog of Miscroscopes and Accessories. The Bausch & Lomb Optical Company of Rochester, N. Y., has issued a catalog of Bausch & Lomb microscopes and accessories best suited to educational institutions. The booklet describes and illustrates compound, binocular, projection, and dissecting microscopes, as well as lamps, magnifiers, reading glasses, colorimeters, microtomes, and telemagnifiers.

The Bausch & Lomb Optical Company is today one of the leading optical institutions of the country and its experience of 74 years in the production of microscopes and accessories is responsible for the improvement and refinements of its products and the acceptance of them as standards of comparison in their respective fields.

A corner of the L. B. equipped library in the beautiful Kibler High School, recently erected in Tonawanda, New York.

Making Library periods *more* pleasant and *more* productive

THE school library . . . and how it is regarded by pupils, is a question which numerous school authorities have often asked. Are most school libraries considered by pupils as "just a place to pass the time by dabbling in books and magazines"? Or, are they used for what they were intended . . . for the promotion of *real* conscientious reading and study?

For many years eminent psychologists have talked about the relationship of "environment" and "atmosphere" to human life and the moulding of careers. This has been particularly true with school children. Today, schools are being built so as to provide plenty of light and fresh air . . . pleasant surroundings . . . soothing color combinations. All these details have tended to create a "homelike atmosphere" in the classrooms.

The library, too, where so many hours are spent each day, must be planned so as to create an atmosphere of dignity, quietness and inspiration, in order to induce *conscientious* reading.

For fifty years Library Bureau has been the authority on the planning and installing of such school libraries throughout the country. L. B. school library furniture is made so as to conform *exactly* with the school's every requirement. Its beauty of design and sturdiness of construction have made it the choice of the library profession everywhere.

For your convenience, Library Division offices are located in the following Rand Kardex Service branches: 118 Federal Street, Boston, Mass.; 451 Broadway, New York City; 39 Second Street, San Francisco, Calif.; 447 Dexter-Horton Building, Seattle, Washington; and 1903 Main Street, Dallas, Texas.

The library experts in any of these offices will be only too glad to answer any questions in regard to Library Bureau technical furniture or library supplies. Call on them!

Library Bureau

DIVISION OF REMINGTON RAND

Mail this coupon to any one of the offices mentioned above and a free copy of "School Libraries" will be sent.

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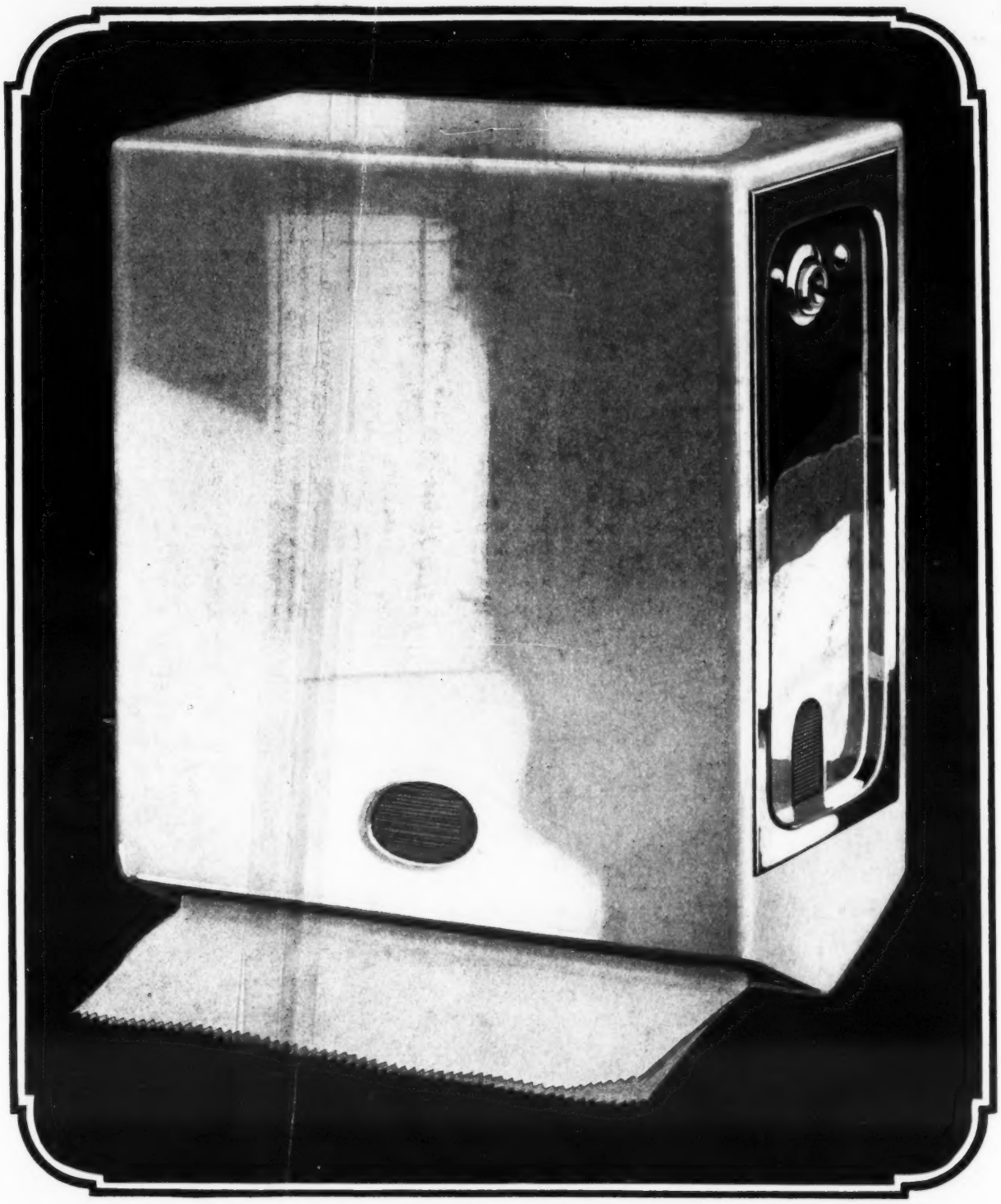

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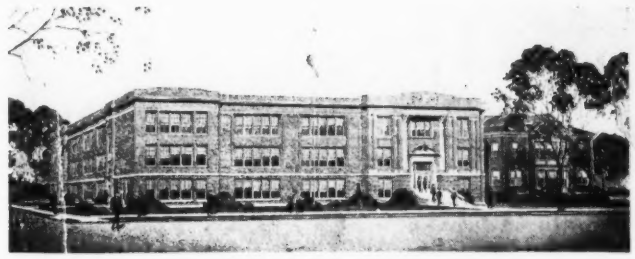
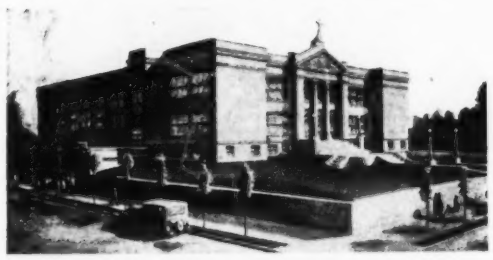
Heacock & Hokanson, Architects.

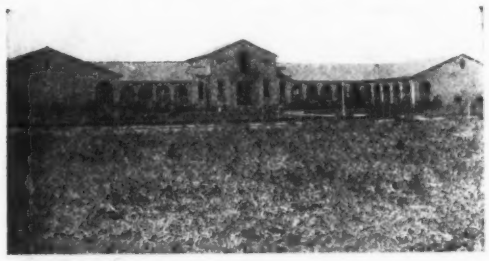


Junior High School, Elizabeth, N. J.,
Howard B. Brady, Architect.



Sacred Heart Parochial School, New Brunswick, N. J.,
Geo. W. Brooks, Architect.

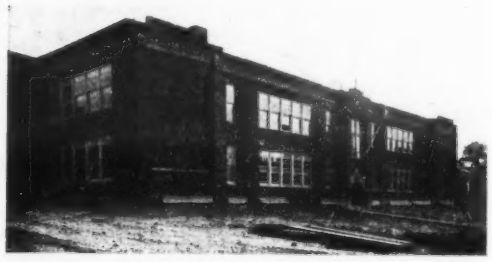
Dunbar High School, Washington, D. C.,
Snowden Ashford, Architect.



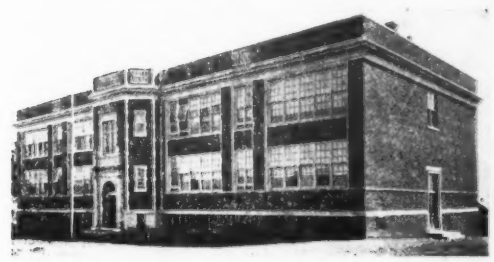
McKinley School, San Gabriel, Calif.,
Quinten & Kerr, Architects.

Ventilation Without Draft

Nathaniel Hawthorne High School, Yonkers, N. Y.
G. Howard Chamberlin, Architect.

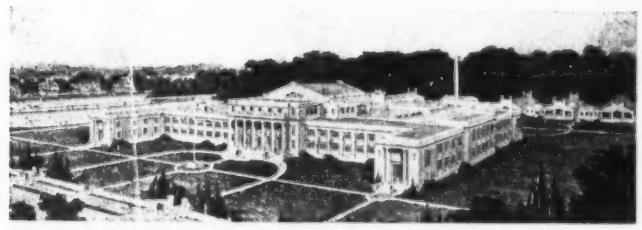


Harry L. Johnson School, Johnson City, N. C.,
C. Edward Vosbury, Architect.



Franklin School, Bloomfield, N. J.,
John F. Capen, Architect.

High Point High School, High Point, N. C.,
Harry Barton, Architect.



William Penn High School, Harrisburg, Pa.
Charles Howard Lloyd, Architect.

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